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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION  
JANUARY 1988

*Have a Safe and Happy New Year!*

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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION

JANUARY 1988

VOL. 81, NO. 1

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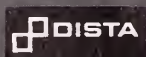
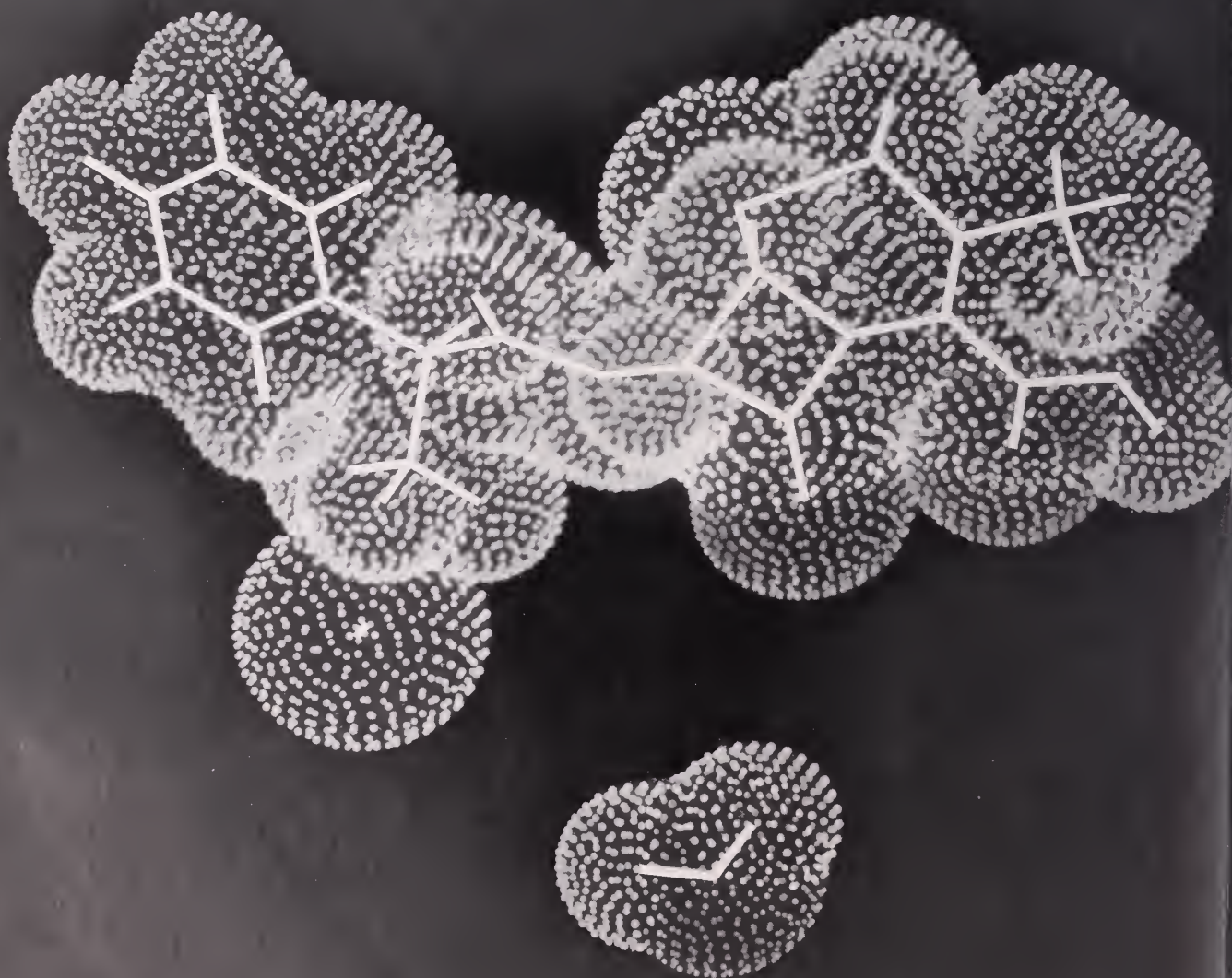


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**cephalexin hydrochloride monohydrate**



**Dista Products Company**  
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Computer-generated model  
structure of cephalexin  
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# Convenient 500-mg b.i.d. dosage and demonstrated effectiveness for treatment of:

skin and skin structure infections\*  
uncomplicated cystitis†  
pharyngitis‡

New hydrochloride salt form of cephalexin—  
requires no conversion in the stomach before  
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Well-tolerated therapy

May be taken without regard to meals

Other indicated infections, 250-mg tablets available  
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Priced less than Keflex® (cephalexin)

Keftab is contraindicated in patients with known allergy to the  
cephalosporins and should be given cautiously to penicillin-  
sensitive patients.

Penicillin is the drug of choice in the treatment and prevention  
of streptococcal infections, including the prophylaxis  
of pneumococcal fever.

\*Effective against susceptible strains of *Staphylococcus aureus* and/or  $\beta$ -hemolytic streptococci.  
†Effective against susceptible strains of *Escherichia coli*, *Proteus mirabilis*, and *Klebsiella* sp.  
‡Effective against susceptible strains of group A  $\beta$ -hemolytic streptococci.

## KEFTAB™

(cephalexin hydrochloride monohydrate)

**Summary:** Consult the package literature for  
prescribing information.

### Indications and Usage:

*Respiratory tract infections* caused by susceptible  
strains of *Streptococcus pneumoniae* and group A  
 $\beta$ -hemolytic streptococci.

*Skin and skin structure infections* caused by sus-  
ceptible strains of *Staphylococcus aureus* and/or  
 $\beta$ -hemolytic streptococci.

*Bone infections* caused by susceptible strains of  
*S aureus* and/or *Proteus mirabilis*.

*Genitourinary tract infections*, including acute pros-  
titis, caused by susceptible strains of *Escherichia*  
*coli*, *P mirabilis*, and *Klebsiella* sp.

**Contraindication:** Known allergy to cephalosporins.

**Warnings:** KEFTAB SHOULD BE ADMINISTERED  
CAUTIOUSLY TO PENICILLIN-SENSITIVE PA-  
TIENTS. PENICILLINS AND CEPHALOSPORINS  
SHOW PARTIAL CROSS-ALLERGENICITY. POSSI-  
BLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with  
virtually all broad-spectrum antibiotics. It must be  
considered in differential diagnosis of antibiotic-  
associated diarrhea. Colon flora is altered by broad-  
spectrum antibiotic treatment, possibly resulting in  
antibiotic-associated colitis.

### Precautions:

- Discontinue Keftab in the event of allergic reac-  
tions to it.
- Prolonged use may result in overgrowth of nonsus-  
ceptible organisms.
- Positive direct Coombs' tests have been reported  
during treatment with cephalosporins.
- Keftab should be administered cautiously in the  
presence of markedly impaired renal function. Al-  
though dosage adjustments in moderate to severe  
renal impairment are usually not required, careful  
clinical observation and laboratory studies should  
be made.
- Broad-spectrum antibiotics should be prescribed  
with caution in individuals with a history of gas-  
trointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined  
in pregnancy and lactation. Cephalexin is excreted  
in mother's milk. Exercise caution in prescribing  
Keftab for these patients.
- Safety and effectiveness in children have not been  
established.

### Adverse Reactions:

- *Gastrointestinal*, including diarrhea and, rarely, nau-  
sea and vomiting. Transient hepatitis and chole-  
static jaundice have been reported rarely.
- *Hypersensitivity* in the form of rash, urticaria, angio-  
edema, and, rarely, erythema multiforme, Stevens-  
Johnson syndrome, or toxic epidermal necrolysis.
- *Anaphylaxis* has been reported.
- *Other reactions* have included genital/anal pruri-  
tus, genital moniliasis, vaginitis/vaginal discharge,  
dizziness, fatigue, headache, eosinophilia, neutro-  
penia, and thrombocytopenia; reversible interstitial  
nephritis has been reported rarely.
- Cephalosporins have been implicated in trigger-  
ing seizures, particularly in patients with renal  
impairment.
- *Abnormalities in laboratory test results* included  
slight elevations in aspartate aminotransferase  
(AST, SGOT) and alanine aminotransferase (ALT,  
SGPT). False-positive reactions for glucose in the  
urine may occur with Benedict's or Fehling's solu-  
tion and Clinistix® tablets but not with Tes-Tape®  
(Glucose Enzymatic Test Strip, USP, Lilly).



# YOCON<sup>®</sup>

## YOHIMBINE HCl

**Description:** Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

**Action:** Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it, however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

**Indications:** Yocon<sup>®</sup> is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

**Contraindications:** Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

**Warning:** Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

**Adverse Reactions:** Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.<sup>1,2</sup> Also dizziness, headache, skin flushing reported when used orally.<sup>1,3</sup>

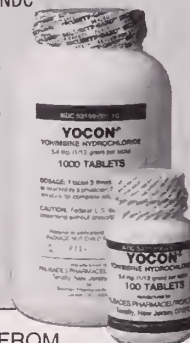
**Dosage and Administration:** Experimental dosage reported in treatment of erectile impotence.<sup>1,3,4</sup> 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.<sup>3</sup>

**How Supplied:** Oral tablets of Yocon<sup>®</sup> 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

#### References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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# CARAFATE<sup>®</sup>

## (sucralfate)

### BRIEF SUMMARY

#### CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

#### PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

**Pregnancy:** Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

#### ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

#### DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

#### HOW SUPPLIED

CARAFATE (sucralfate) 1-gm pink tablets are supplied in bottles of 100 and in Unit Dose Identification Paks of 100. The tablets are embossed with MARION/1712. Issued 3/84

#### References:

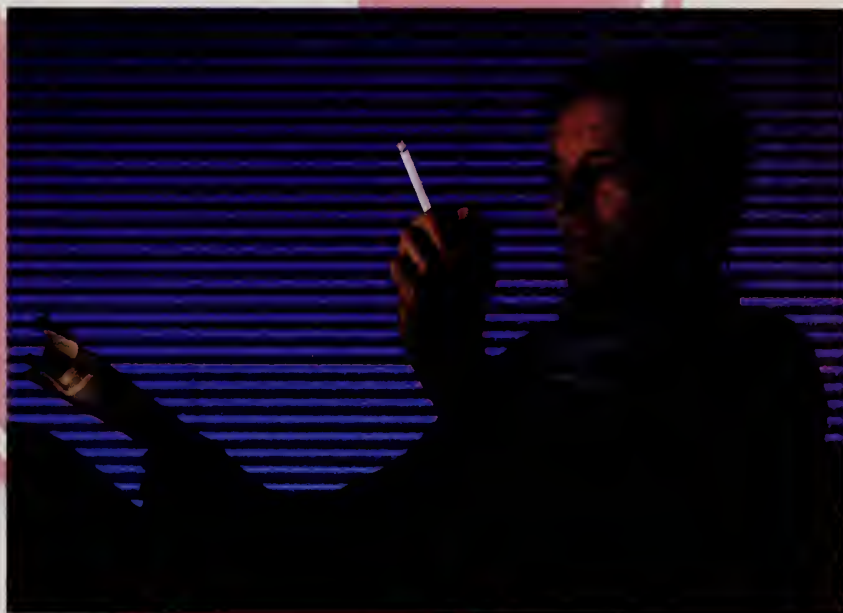
1. Korman MG, Shaw RG, Hansky J, et al. *Gastroenterology* 80:1451-1453, 1981.
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5. Lam SK, Hui WM, Lau WY, et al. *Gastroenterology* 92:1193-1201, 1987.

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# Ulcer therapy that won't yield, even to smoking

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What do you do for duodenal ulcer patients who should stop smoking, but won't? Both cimetidine<sup>1</sup> and ranitidine<sup>2</sup> have been shown less effective in smokers than nonsmokers.

Choose CARAFATE® (sucralfate/Marion). Two recent studies show Carafate to be as effective in smokers as nonsmokers.<sup>3,4</sup> A difference further illustrated in a 283-patient study comparing sucralfate to cimetidine<sup>5</sup>:

Ulcer healing rates:  
(at four weeks of therapy)<sup>5</sup>

Sucralfate:

All patients	79.4%
Smokers	81.6%*

Cimetidine:

All patients	76.3%
Smokers	62.5%

Carafate has a unique, nonsystemic mode of action that enhances the body's own ulcer healing ability and protects the damaged mucosa from further injury.

When your ulcer patient is a smoker, prescribe the ulcer medication that won't go up in smoke: safe, nonsystemic Carafate.

Nothing works like

  
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sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

\*Significantly greater than cimetidine smoker group ( $P < .05$ ).



# Motrin<sup>®</sup> 800 TABLETS mg

ibuprofen



Extra strength  
Convenience  
Economy



A Century  
of Caring  
1886-1986

Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

**Contraindications:** There are no known contraindications to the use of 'Tagamet'.

**Precautions:** While a weak antiandrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlorthalidoxime, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. (Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.)

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

**Adverse Reactions:** Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported. Including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly unlikely.

A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

**How Supplied:** Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

**Liquid:** 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

**Injection:**

**Vials:** 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

**Prefilled Syringes:** 300 mg./2 ml. in single-dose prefilled disposable syringes.

**Plastic Containers:** 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

**ADD-Vantage® Vials:** 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) Injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

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In peptic ulcer:

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REWARD**



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**First to Heal**

You'll both feel good about it.

**RESULTS**



# A defense against cancer can be cooked up in your kitchen.



Fruits, vegetables, and whole-grain cereals such as oatmeal, bran and wheat may help lower the risk of colorectal cancer.

Foods high in fats, salt- or nitrite-cured foods like ham, and



There is evidence that diet and cancer are related. Some foods may promote cancer, while others may protect you from it.

Foods related to lowering the risk of cancer of the larynx and esophagus all have high amounts of carotene, a form of Vitamin A which is in cantaloupes, peaches, broccoli, spinach, all dark green leafy vegetables, sweet potatoes, carrots, pumpkin, winter squash and tomatoes, citrus fruits and brussels sprouts.



fish and types of sausages smoked by traditional methods should be eaten in moderation.

Be moderate in consumption of alcohol also.

A good rule of thumb is cut down on fat and don't be fat.

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### Positively good news . . . probably

It's a real pleasure to start the new year off with some good news. My reasoning may be a bit skewed but, as I see it, good news is good news, and certainly should be welcome.

In case you haven't heard yet, we physicians are probably going to pay lower income taxes in 1988. Yes, in spite of the tax reform measures we will all enjoy in 1988, *we*, as a very select group of citizens, can expect to pay the state and federal governments a few dollars less in taxes.

The reason for the good news is, of course, the bad news. Our incomes will be less in 1988 and, if trends continue, in 1989 also. Across-the-board reductions in Medicare reimbursements will be significant and will be paired with reductions in allowances for certain "overpriced procedures." What these plans actually portend no one knows, beyond the fact that physicians' incomes will decline.

How much your income will decline will depend on a great variety of issues: How many of your patients are Medicare beneficiaries; whether you are a "participating" or "nonparticipating" physician; how many of the "overpriced procedures" you perform; what your MAAC is; whether you are a member of a "corporate practice" entity; and how long the new freeze on physician fees will last.

How much your taxes will *increase* will also depend on a great variety of issues: How much interest you are paying for your car loan, your home mortgage, your credit purchases, your bank loans;

whether you have a retirement fund; whether you are a professional corporation; whether you travel in connection with your practice.

In all probability you won't be able to come close in predicting the net effect of the good news/bad news variables. Some of the rules you will be required to follow haven't even been written yet. If you are tempted to indulge in predictions, you should avoid the use of logic. Nothing will be logical.

Consider, for example, the changes in store for the recipients of Social Security benefits. They will receive an allowance increase to meet the increase in the cost-of-living index. Then, they will be required to pay more for their Medicare coverage. Whether this results in a net increase or a net decrease in their income remains to be seen. Logic would suggest that because they are paying more for health care, the physicians who provide that care would also enjoy an increase in their earnings—at least enough to offset the increase in their cost of living. But no such logic will prevail. Physicians will be paid less for their services and will, in addition, pay more for the expenses of living and maintaining an office.

If nothing else is clear in our dimly lit future, you can take heart in a fragment of good news. Your income taxes will be less in 1988.

Probably.

—MRJ

## PRESIDENT'S PAGE

As we start the new year, it is appropriate to announce the establishment of two new Oklahoma State Medical Association committees: the Physician's Rights Committee and the Physician Support Committee.

Contrary to what many in the public believe, medicine is by far the most thoroughly scrutinized of professions. Beginning with the licensing process so ably conducted by the Oklahoma Board of Medical Licensure and Supervision and including hospital credentialing committees, quality review departments, tissue committees, morbidity and mortality reports, peer review organizations, and insurance companies — both private and the government's Medicare — all of which review not only how we practice but how much we charge, no profession is so carefully watched. Other professionals would chafe under these conditions. As physicians, we welcome and accept review by our peers and interested parties as necessary to our profession.

For the most part, these review procedures by third parties work well to ensure the quality of medical care.

Occasionally, however, a physician is treated unfairly by the process.

The Physician's Rights Committee will serve as a physician's final advocate if, after all appropriate appeals have been conducted, a doctor believes that



a decision by a hospital, insurance company, the government, etc., is unfair and unjust.

Norman L. Dunitz, MD, Tulsa, will chair the Physician's Rights Committee. Others who have agreed to serve are: Joseph E. Leonard, MD, Oklahoma City; Dennis K. McIntyre, MD, Enid; Clarence Robison, Jr., MD, OKC; Edward J. Tomsovic, MD, Tulsa; Steven E. Wegner, MD, Oklahoma City; and resident physician Joseph Andrezik, MD, Oklahoma City.

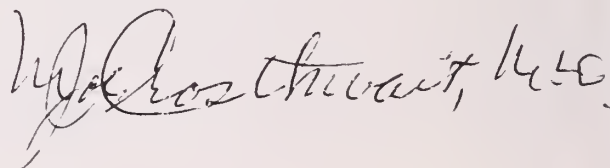
Perhaps the worst thing that can happen to a physician is to be sued for malpractice. Sadly, our chances of being sued are about even, and very often actual malpractice has nothing to do with the litigation.

Physicians who are sued may experience anger, fear, depression, or rage. A lawsuit can linger for years, subtly affecting physician and family.

The Physician Support Committee will offer its assistance and counseling to physicians who have been sued and their families.

Orange M. Welborn, MD, Ada, will chair the Physician Support Committee.

In an ideal world, neither committee would ever have to function. Since we exist in reality, I encourage you to use the resources of the Physician's Rights Committee and the Physician Support Committee if, and when, you need them.





# **Oklahoma State Department of Health**

## **AIDS Task Force**

### **Recommendations to Date**

**March 3, 1987**

These recommendations represent a consensus of opinion in Oklahoma at this time. It should be noted, however, that they are undergoing constant reassessment as new information becomes available. At press time, several changes had been proposed and were under consideration by the Task Force.

This document contains the recommendations which have been approved to date by the Oklahoma State Department of Health AIDS Task Force. As the Task Force continues its work, more guidelines and recommendations will be forthcoming, and will be added to this document.

We are indebted to the members of the AIDS Task Force, whose diligent work has continued to produce valuable guidelines in our attempts to control AIDS. The members of the Task Force, and the agencies and groups which are represented, are listed on the following page. Membership of each of the Committees of the Task Force is listed in the appropriate sections.

Joan K. Leavitt, MD  
Commissioner of Health  
Oklahoma State Department of Health

March 3, 1987

**Oklahoma State Department of Health**  
**AIDS Task Force**  
March 3, 1987

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#### **Agencies**

American Red Cross  
Oklahoma Blood Institute  
Oklahoma Hospital Association  
Oklahoma City AIDS Task Force  
Tulsa AIDS Task Force  
Oklahoma Nurses Association  
Red Cross Blood Services — Oklahoma Region  
Oklahoma State Dental Association  
Oklahoma Osteopathic Association  
Oklahoma State Medical Association  
Oklahoma State Department of Education  
Oklahoma State Department of Health  
Oklahoma State Department of Human Services  
Oklahoma State Department of Mental Health  
Oklahoma State Department of Corrections

From the Oklahoma State Department of Health, PO Box 53551, Oklahoma City, OK 73152.



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**I.**  
**The following are recommendations from the**  
**Infectious Disease Advisory Committee\***  
**of the**  
**Oklahoma State Health Department AIDS Task Force**  
**Adopted 1986**

- General Guidelines for the Prevention of Transmission of Infection with the Human Immunodeficiency Virus
- Guidelines for Prevention of Transmission of Human Immunodeficiency Virus in Health Care Settings
- Guidelines for Schools and Child-care Centers
- Guidelines for Institutions in Dealing with AIDS and Human Immunodeficiency Virus Infections
- Guidelines for Immunization of Individuals Infected with Human Immunodeficiency Virus
- Indications for HIV Serological Testing

**General Guidelines for Prevention of Transmission of Infection with the Human Immunodeficiency Virus**

**Comment:**

The Human Immunodeficiency Virus [HIV, previously called by various names, including Human T-lymphotropic Virus type III (HTLV-III) and Lymphadenopathy-associated

Virus (LAV)] is a recently recognized retrovirus which causes persistent infection. Infected individuals may be asymptomatic or have disease ranging from mild to severe. The most severe disease state caused by HIV is the acquired immunodeficiency syndrome (AIDS). Infection is transmitted through sexual contact, by parenteral exposure to infected blood or body secretions or other tissues, or perinatally from mother to child. Other kinds of contact are either not capable of transmitting infection or do so

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extremely rarely. Public health and personal control measures should be directed at realistic risks.

#### Recommendations:

1. Persons in high-risk categories (male homosexuals, prostitutes, promiscuous heterosexuals, intravenous drug abusers, hemophiliacs treated with factor VIII concentrates, sexual partners or children of individuals in high-risk groups) should be the targets of educational programs about risks of transmission and methods to reduce risks. Individuals in such groups should not donate or sell blood, semen, or body organs.
2. Efforts should be made to educate the general public as to realistic risks of transmission.
3. Serological testing and health screening should be directed toward individuals in high-risk groups. There are no indications at present for any serological testing of other groups.
4. Establishments which directly contribute to spread of disease (bath houses, centers of prostitution, "shooting galleries") are targets for public health efforts, including forced closing if necessary.
5. In general, there is very little or no risk of transmission of infection in social or work situations (in the absence of sexual contact or parenteral exposure to blood or blood components) and therefore restrictions are not necessary. Routine serological testing is not indicated.
  - (a) Those whose work involves close contact with clients (e.g., barbers, massage therapists, manicurists) are not at greater risk of acquiring or transmitting infection than other workers.
  - (b) When close work contact also involves needles or other penetrating instruments (e.g., tattooing, ear piercing), a finite but apparently low risk of transmission of infection is introduced. Such workers should be educated about risks of transmission. Instruments should be sterilized, otherwise disinfected, or disposed of between clients.
  - (c) Food Service does not pose a hazard. Guidelines for food service workers do not differ from general guidelines.
6. Body secretions other than blood (e.g., tears, saliva, skin exudates) may contain virus and pose a finite but largely unknown risk. Modest precaution would seem prudent.
  - (a) Individuals with exudative skin lesions should take precautions to protect others from these secretions. This precaution would be especially important for personal service and food service workers known to be HIV-serology positive but are appropriate for all for reasons not limited to concerns about HIV infection.
  - (b) Sharing of contact lenses or shared use of lens wash fluids should be discouraged.
  - (c) Individuals in high risk groups with unknown serology or persons known to be HIV-serology positive should refrain from intimate kissing.

#### Guidelines for Prevention of Transmission of Human Immunodeficiency Virus in Health Care Settings\*

##### Comment:

Because of potential exposure to blood, health care workers are likely at greater risk of acquiring Human Immunodeficiency Virus (HIV) infection than are most other occupational groups. It should be stressed that parenteral exposure to blood is by far the most dangerous exposure and that provision of health care is otherwise of very low risk. Health care workers not belonging to a high-risk group do not appear to have a higher incidence of HIV infection than the general population. Even in cases of known parenteral exposure to HIV-infected blood, studies suggest a very low risk of HIV infection and an even lower risk of developing the acquired immunodeficiency syndrome (AIDS). Therefore, precautions are reasonable but should be appropriate to the degree of risk.

It should also be emphasized that body fluids should always be handled with appropriate care, since it is not possible for all HIV-infected fluids to be identified. Patients with HIV infection or who are in a high-risk group for HIV infection may not be known to their physicians as such. Serological results of testing will invariably lag behind identification of risks, and it is estimated that perhaps 1% of individuals in a high-risk group will be in a serological "window" at any one time (i.e., they will be infectious but not yet with demonstrable antibodies to the virus).

##### Recommendations:

1. Standard procedures for blood and body fluids precaution (such as are used for hepatitis B) should be used for patients known or suspected to be infected with HIV. A single system should be used for HIV, hepatitis B, and other such infections; use of specific labelling (e.g., "AIDS precautions") of patient rooms or specimens is discouraged.
2. Routine isolation or screening of patients known or suspected to be in high-risk groups is not recommended. Such procedures are more likely to induce a false sense of security regarding unlabelled body fluids than to provide adequate protection. In addition, they raise serious problems of confidentiality and liability.
3. Patient consent should usually be obtained prior to serological testing for HIV infection. This recommendation should not be understood to preclude testing if medically indicated for patient care and diagnosis.
4. Educational efforts should be directed toward health care workers' understanding of the potential infectivity (not limited to HIV) of all body fluids and implementation of appropriate precautions. Such precautions include but are not limited to:
  - (a) Careful handling of sharp items such as scalpels and needles.
  - (b) Disposal of contaminated items (needles, scalpels,

#### References:

1. Morbidity and Mortality Weekly Report 35, No. 10, 1986.
2. Morbidity and Mortality Weekly Report 34, No. 45, 1985.

[\*The AIDS Task Force has proposed that these recommendations be replaced by the recent guidelines from the Centers for Disease Control entitled "Recommendations for Prevention of HIV Transmission in Health-Care Settings," Morbidity and Mortality Weekly Report, Vol. 36, No. 25, August 21, 1987.]



- pipettes, etc) in puncture-proof containers. In the specific instance of Vacutainer tubes, there are no data as to any possible increased risk due to use of this specific apparatus. We recommend use of a special disposal unit which combines puncture-proof structure with a top slot specifically designed to retain Vacutainer needles for unscrewing. Several are available on the market. In addition, Vacutainer needles with interior rubber covers are preferred.
- (c) Use of barriers when indicated, such as gloves for handling bloody instruments, gowns for extensive contact with fluids, masks and eye covering if aerosolization likely.
  - (d) Use of careful handwashing procedures
5. In the event of a health care worker's being exposed parenterally or via mucous membranes to body fluids, the source patient should be assessed regarding the possibility of HIV infection (in addition to other potential infections such as hepatitis B and syphilis). A suggested screening instrument to determine likelihood of HIV infection is appended. If HIV infection seems possible, then the patient should be informed and serological testing requested. If serology is negative or if screening suggests no evidence of HIV infection, then no further followup is necessary. If serology is positive, if the patient refuses testing, or if HIV infection seems likely on clinical grounds (e.g., the patient has a clinical condition suggestive of AIDS or AIDS-related complex), then the exposed health-care worker should be evaluated clinically and serologically at that time, at 6 weeks, and periodically thereafter for at least one year. If seroconversion does not occur, followup can be terminated at one year. If the health care worker develops serological evidence of infection, then clinical followup should be continued indefinitely.
  6. Health care workers with known HIV infection should be counselled regarding methods of transmission of the virus but work restrictions are not generally necessary. Serological screening of health careworkers is not indicated.
  7. Invasive medical procedures (e.g., surgery, obstetric procedures, vascular catheterization, dentistry) provide a theoretically greater risk of transmission of HIV infection than general medical care. At present, there are no reported instances of transmission to or from patients and any risk appears to be very low. Nevertheless, precautions would be prudent.
    - (a) Health care workers participating in invasive procedures should be educated regarding HIV infection and modes of transmission.
    - (b) Appropriate gloving and other barrier precautions should be scrupulously maintained.
    - (c) Extraordinary care should be used in handling sharp objects.
    - (d) Parenteral exposure of a patient to the blood of a health care worker or vice versa should be handled as outlined in Recommendation 5 above.
    - (e) Routine serologic screening of patients or health care workers prior to invasive procedures is not recommended.
  - (f) Continued involvement in invasive procedures of a health care worker known to have HIV infection is problematic. Concern as to transmission of infection to a patient is understandable. However, the chances of such transmission seem exceedingly slight and far less than the reverse risk. At present, it is recommended that such health care workers receive extensive counselling and use all available precautions (e.g., double gloving, extra care).
  8. Dialysis treatment of HIV-infected patients does not appear to require any precautions other than the ones recommended for all dialysis procedures. Standard methods of infection control appear effective against this virus.
  9. Children born to women with HIV infection are at great risk of acquiring infection in utero, during birth, or in the early postnatal period.
    - (a) Pregnant women in high-risk groups should be offered HIV serological testing.
    - (b) HIV-infected women should be counselled as to risk of transmission and encouraged to defer pregnancy.
    - (c) HIV-infected mothers should be advised not to breast feed.
    - (d) Infants born to infected mothers should be followed closely for development of HIV infection and AIDS.

## References:

1. Morbidity and Mortality Weekly Report 34, No. 45, 1985.
2. Morbidity and Mortality Weekly Report 35, No. 14, 1986.
3. Morbidity and Mortality Weekly Report 35, No. 23, 1986.
4. Morbidity and Mortality Weekly Report 34, No. 48, 1985.

### Appendix: Suggested Questions to Determine the Likelihood of HIV Infection

In the event of a needle-stick injury, the source patient or health care workers should be evaluated for evidence of HIV infection. This can usually be accomplished discretely by chart review or discussion with the attending physician. In the absence of any evidence of HIV infection, no further evaluation of this potential is necessary. If evidence is found, then the source individual should be approached regarding serotesting, after consultation with the primary physician. A "yes" answer to any of the questions below (from chart reviews or interviews) places the person at higher likelihood of HIV infection. This screening tool is used at some local hospitals.

1. Is the source person in a high risk group?
  - a. homosexual or bisexual man \_\_\_\_\_
  - b. IV drug abuser \_\_\_\_\_
  - c. hemophiliac \_\_\_\_\_
  - d. Haitian \_\_\_\_\_
  - e. sexual partner of a person at risk \_\_\_\_\_
2. Does he/she have an infection suggestive of AIDS, in the absence of some other cause (e.g., cancer)?
  - a. Pneumonia, meningitis, or encephalitis due to
    - (1) Aspergillus \_\_\_\_\_
    - (2) Candida \_\_\_\_\_
    - (3) Cryptococcus \_\_\_\_\_
    - (4) Cytomegalovirus \_\_\_\_\_
    - (5) Herpes simplex \_\_\_\_\_

- (6) *Strongyloides* \_\_\_\_\_
- (7) *Toxoplasma* \_\_\_\_\_
- (8) *Mucorales* \_\_\_\_\_
- (9) Atypical mycobacteria \_\_\_\_\_
- b. Esophagitis due to candida, herpes simplex, or cytomegalovirus \_\_\_\_\_
- c. Mucocutaneous herpes simplex infection that is unusually severe or of greater than four weeks duration \_\_\_\_\_
- d. Disseminated (or central nervous system) infection with coccidioides, histoplasma, or cryptococcus \_\_\_\_\_
- e. Chronic (>4 weeks duration) enterocolitis due to cryptosporidium or isospora belli \_\_\_\_\_
- 3. Does he/she have progressive multifocal leukoencephalopathy not explained by an underlying malignancy?
- 4. Does he/she have Kaposi's sarcoma? Central nervous system lymphoma?

#### Guidelines for Schools and Child-care Centers

#### Comment:

Infection with the Human Immunodeficiency Virus (HIV), the etiologic agent of the Acquired Immunodeficiency Syndrome (AIDS), is transmitted by blood and semen, and perhaps by other body fluids. The primary mechanisms of spread are sexual intercourse (especially male homosexual intercourse) and sharing of needles used for intravenous drug administration. Transmission by casual contact, even among family members dwelling in the same household, has not yet been documented. By analogy to hepatitis B, an agent of much greater transmission potential, it would appear that school, pre-school, or daycare settings do not offer likely settings for virus transmission. These basic points should be borne clearly in mind in establishing appropriate guidelines for protection of children and adolescents in educational settings. Guidelines should address realistic risks of blood or secretion contamination or exchange of semen.

#### Recommendations:

1. In the event that a school-aged child is known to be infected with HIV, a team should be developed on an individual basis to determine advisability of school admission and need for any special precautions. This team should include the student's physician and parents, public health and school personnel. Confidentiality should remain an important priority.
2. The remote risks of transmission in an educational setting are far less than the significant risks of general screening and misidentification of children as a result of false positive serological tests in a low incidence population. We recommend serological testing only for children in high-risks groups (mother with HIV infection, hemophilia, sexual contact of individual with HIV infection, intravenous drug abuser).
3. A child with HIV infection who has uncontrolled

- behavior, primarily as manifested by biting, poses a theoretical risk to other children, even though transmission by biting has not been documented. Such a child should not be permitted in a daycare or educational setting with non-infected children.
4. Any HIV-infected child with uncoverable open sores should remain out of school until the sores heal or can be adequately covered.
  5. Attendants at daycare and preschool facilities should be instructed in risks of transmission of HIV as well as other infectious agents. They should use appropriate decontamination measures routinely, including dilute hypochlorite solutions to clean environmental surfaces and proper handwashing techniques.
  6. There are no data to suggest that HIV-infected preschool children can transmit infection to playmates, even though the intimate contacts in children of this age (shared teething toys, fecal-oral contamination, etc.) raise theoretical concerns. We consider it prudent at this time that HIV-infected children less than 3 years of age should not be cared for in usual daycare settings. There is a need for development of programs (including day care and foster care) for HIV-infected infants.
  7. For older children, there are theoretical risks of transmission of HIV infection by intense contact sports in which bleeding is common (particularly rugby and wrestling) or by shared use of band instruments (brass, woodwinds). It is stressed that no data exist to support such a mode of transmission and that we feel this to be a remote risk. Nevertheless, it would be prudent to counsel a known HIV-infected student to abstain from such sports or from sharing band instruments. Band instructors should be instructed in proper decontamination procedures which should be used routinely if band instruments are shared.
  8. At domiciliary educational institutions, there is a theoretical risk of transmission, primarily between roommates, by blood exchange (shared razors, shared toothbrushes) or semen exchange (homosexual intercourse). Data from studies of household contacts of patients with AIDS would suggest that the risk from a shared toothbrush is low; risks of shared razors are unknown; homosexual intercourse carries a high risk. HIV-infected individuals should be counselled regarding their responsibility to take precautions to minimize spread by mechanisms known to be dangerous. Specifically they should avoid sharing razors and toothbrushes and abstain from unprotected (i.e., without condoms) sexual activity. Private rooms are not necessary on microbiological grounds but may be considered for psychological reasons.
  9. Children with HIV-induced immunosuppression are at increased risk of severe complications from a number of infectious diseases (chickenpox, tuberculosis, measles, cytomegalovirus, and herpes simplex virus) and from live vaccines. Risks to the child of exposure to other children should be periodically reassessed in determining appropriateness of school attendance (see Recommendation 1, above). Known HIV-infected children should not be required to receive live vaccines as a condition of school attendance.



10. If there is felt to be significant percutaneous or mucosal exposure to HIV-infected tissue among school personnel or other students the guidelines for Health Care Settings (Recommendation number 5) should be consulted.

#### References:

1. Morbidity and Mortality Weekly Report 34:517-521, 1985.
2. Review of Infectious Diseases 8:606-612, 1986.
3. Report of the Committee on Infectious Diseases, American Academy of Pediatrics, 1986.
4. Morbidity and Mortality Weekly Report 35:595-606, 1986.

### Guidelines for Institutions in Dealing with AIDS and Human Immunodeficiency Virus Infections

#### Comment:

Infection with Human Immunodeficiency Virus (HIV), the etiologic agent of the Acquired Immunodeficiency Syndrome (AIDS), is transmitted by blood and semen, and perhaps by other body fluids. The primary mechanisms of spread are sexual intercourse (especially male homosexual intercourse) and sharing of needles used for intravenous drug administration. Transmission by casual contact never has been documented, and occurs rarely, if at all.

By analogy to hepatitis B, an agent of much greater transmission potential, it appears that certain institutional settings such as institutions for the mentally retarded and correctional facilities may represent potential settings for the transmission of HIV infection. Guidelines for prevention of HIV infection should address the realistic risks of blood or body fluid contamination, especially through sexual contact, sharing of contaminated needles, and through contact with open, weeping lesions. As of the date of this writing, the available data indicate that no cases of AIDS have been transmitted in settings of institutions for the retarded, and although such transmission may occur in prisons, it appears to occur rarely and as the result of sharing needles for intravenous drug use or of sexual transmission. The risk of spread from other types of contact is small.

#### Recommendations:

1. Educational programs which deal with AIDS and HIV infection should be offered to institutional staff and to residents who could benefit from them. These programs should emphasize the ways in which HIV infection is spread and should also emphasize the ways in which it is not spread. The educational program should emphasize appropriate precautions to be taken to prevent transmission or acquisition of HIV infection including the use of condoms and other preventive measures. These precautions are similar to those found in the Recommendations for Prevention of HIV Infection in Health Care Settings.
2. Screening of residents of institutions for presence of the HIV antibody should not be performed routinely. Testing of residents should be done as indicated for assessment of clinical conditions possibly related to AIDS, as is needed for the monitoring of institutional staff or residents who have percutaneous exposure, or for evaluation of individuals known to be in a high-risk group for AIDS. If testing for HIV antibody is performed, the test should be done with informed consent, if possible, and the results should remain confidential. Any person who is tested should also be counselled regarding the meaning of the test results. Transmission of HIV infection and AIDS is most likely to occur through sexual contact or through sharing contaminated needles during intravenous drug use. Steps should be taken to minimize such potential exposures in the institutional setting.
3. In the event that a client or resident of the institution is known to be infected with HIV, a team of persons should be developed to determine the appropriate setting for the client. This team should be composed of the patient's physician, a representative of the institution, a parent or guardian of the patient (if applicable), and a representative of the Department of Health. The team should take into account the lack of spread of HIV infections in the casual or household-type setting. Sexual (both homosexual and heterosexual) and needle-sharing behaviors are the highest risk for transmission of HIV infections, and should be a major consideration in determining placement of the patient. In addition, certain uncontrolled behavior, such as biting, and certain medical conditions such as uncoverable oozing lesions, may represent a risk of spread of HIV infection. There is a theoretical risk of HIV transmission, primarily between roommates, by blood exchange through shared razors or shared toothbrushes. Data from studies of household contacts of patients with AIDS would suggest that the risk from a shared toothbrush is low; risks of shared razors are unknown. Clearly, sexual activity carries a high risk. HIV-infected individuals should be counselled regarding their responsibility to take precautions to minimize spread by mechanisms known to be dangerous. Specifically, they should avoid sharing razors and toothbrushes and abstain from unprotected sexual activity. Private rooms are not necessary for the otherwise normal resident, on microbiological grounds, but may be considered for psychological reasons.
4. The same general precautions to prevent transmission of HIV infection should be utilized in institutions as those which are recommended in health care settings. These include extraordinary care in the handling of sharp instruments and needles which are contaminated with blood from any person; needles should not be re-capped, purposefully bent, broken, removed from disposable syringes, or otherwise manipulated by hand. Needles and other sharp instruments should be placed into puncture-resistant containers before disposal. Thorough handwashing is important after contact with blood or other fluids.
5. With regard to disposal of waste and laundry and other housekeeping articles, there are no data to suggest that transmission of HIV infection has ever occurred with such contaminated articles. However, it seems prudent that the following guidelines be used with regard to housekeeping and waste disposal. Routine



procedures for the handling of laundry and dishes are adequate to decontaminate linens, clothing, dishes, glassware and eating utensils. If there is a need to handle items which are soiled with blood or to clean equipment which is contaminated with blood or other body fluids, gloves should be used in this process. Such contaminated articles could be cleaned with soap and water and disinfected with a 1:10 dilution of household bleach, for example. Items which are contaminated with blood or other body fluids and which cannot be flushed down a toilet, such as sanitary napkins, should be wrapped securely in a plastic bag and that bag into a second bag and disposed of with other solid waste.

6. Each institution should develop a protocol for managing incidents which could result in the transmission of HIV infection. These incidents may be any of the following, among others: a needlestick with a needle which has been used to draw blood or give an injection, a bite where the skin has been broken, sexual contact, including sexual assault, contamination of an open wound by blood or other body fluids, contamination of any mucous membrane with blood or other body fluids. When such an exposure takes place, there should be follow-up as outlined in the Guidelines for Health Care Settings, recommendation #5.
7. Persons with HIV induced immunosuppression are at increased risk of severe complications from a number of infectious diseases including chickenpox, tuberculosis, measles, cytomegalovirus and herpes simplex virus, and perhaps from live vaccines. The risks to the infected, immunosuppressed person, from exposure to other people should be periodically reassessed in determining the most appropriate setting for that person. Known HIV infected persons should not be required to receive live virus vaccines as a condition of their residence.

#### References:

1. Morbidity and Mortality Weekly Report 34:517-521, 1985.
2. Morbidity and Mortality Weekly Report 34:681-695, 1985.
3. Morbidity and Mortality Weekly Report 35:152-154, 1986.
4. Morbidity and Mortality Weekly Report 35:195-199, 1986.

### Guidelines for Immunization of Individuals Infected with Human Immunodeficiency Virus

#### Comment:

Infection with the human immunodeficiency virus (HIV) impairs the host's immune defenses and predisposes to various opportunistic infections, as well as more commonly encountered infections not generally considered opportunistic (e.g., pneumococcal pneumonia, *Haemophilus influenzae* pneumonia). Infected individuals are at least theoretically at risk from immunization with live vaccines. They should however benefit from immunizations with non-live vaccines, especially if these are administered early in the course of HIV infection, prior to profound immunosuppression. There is no evidence of adverse effect from such vaccinations peculiar to HIV-infected patients.

#### Recommendations:

1. Live vaccines should be used with caution in HIV-infected individuals.
  - a. Asymptotically infected children can probably safely receive measles, mumps and rubella vaccines.
  - b. Oral polio vaccine should not be used for anyone in a household with HIV-infected members.
2. Routine immunizations with killed or subunit vaccines (e.g., diphtheria, pertussis, tetanus, inactivated polio vaccines) should be given.
3. Hepatitis B vaccine is recommended for individuals lacking serological evidence of prior hepatitis B infection.
4. Pneumococcal and *Haemophilus influenzae* b vaccines should be considered for all HIV-infected individuals, according to standard recommendations.
5. Influenza vaccine should be administered on a yearly basis.
6. Passive immunization with appropriate immune globulin should be employed following significant exposure of an HIV-infected individual to someone with measles or varicella-zoster infection.
7. Tuberculin testing is not contraindicated. Results may be falsely negative in the immunosuppressed HIV-infected individual.

#### References:

Report of the Committee on Infectious Diseases, Twentieth Edition 1986. American Academy of Pediatrics Pages 81-87.

### Indications for HIV Serological Testing

#### Comment:

Human immunodeficiency virus (HIV) causes a profound immunosuppression which renders infected individuals subject to opportunistic infections and unusual tumors. Virus is present in blood, other body fluids and tissues, semen, and secretions (tears, saliva, etc.). Transmission occurs almost exclusively through interchange of blood and semen, perhaps through vaginal or cervical secretions. The practices most clearly demonstrated to transmit infection are sexual intercourse (especially anal intercourse), shared use of intravenous needles and other equipment, and blood or blood product transfusion. Casual contact, even of the kind experienced by non-sexual household contacts, appears to carry very low if any risk. Therefore, serological testing should be directed toward high-risk individuals and groups.

Serological tests are aimed at detection of antibodies to HIV as an indirect measure of infection. The principal screening test is an enzyme-linked immunosorbent assay (ELISA). False positive tests occur, usually at low titer, and are more likely to be a problem in low-risk populations. False negatives occur rarely. Positive ELISAs should be confirmed with the Western Blot assay.

#### Recommendations:

1. Individuals in high-risk groups should be offered

- serological testing. These groups include:
- a. Homosexual and bisexual men.
  - b. Illicit intravenous drug users.
  - c. Heterosexuals who have multiple sexual partners.
  - d. Male and female prostitutes.
  - e. Hemophiliacs treated with factor concentrates prior to 1986.
  - f. Recipients of blood or blood products from donors with HIV-infection or in a high-risk group.
  - g. Persons who are natives of countries where heterosexual transmission is thought to play a major role (e.g., Haiti, Central African countries).
  - h. Sexual partners of HIV-infected individuals or of individuals in high-risk groups.
  - i. Children of mothers in high-risk groups.
2. Health care workers or others exposed parenterally or mucosally to blood or body fluids from individuals with HIV infection or in a high-risk group should be offered serological testing immediately, at 6 weeks, and periodically thereafter for 1 year.
  3. Individuals with manifestations compatible with AIDS or AIDS-related complex should be considered for serological testing. Such manifestations might include:
    - a. Chronic unexplained lymphadenopathy.
    - b. Unexplained wasting and prolonged fever.
    - c. Unexplained thrombocytopenia or lymphopenia.
    - d. Unexplained dementia, encephalitis, or degenerative neuropathy.
    - e. Persistent unexplained diarrhea.
    - f. Opportunistic infections.
    - g. Kaposi's sarcoma.
    - h. Lymphoma involving the central nervous system.
    - i. Chronic lymphoid interstitial pneumonia in children.
  4. In general, serological testing should be performed with full knowledge and consent of the subject individual. This recommendation should not be understood to preclude testing if medically indicated for patient care and diagnosis.
  5. Serological testing should be accompanied by careful counseling of the subject individual as to the meanings of positive and negative tests. Appropriate psychological support should be available.
  6. Serological screening is *not* recommended for other groups unless individuals are otherwise at risk. Specifically routine testing is *not* recommended for:
    - a. Those whose work involves close contact with clients (e.g., barbers, manicurists).
    - b. Food service workers.
    - c. Health care workers.
    - d. Hospitalized patients.
    - e. Preoperative patients.
    - f. Dialysis patients.
    - g. Children in day-care or educational settings.
    - h. Attendants in day-care settings or school teachers.
    - i. Residents of domiciliary or penal institutions.
    - j. Employees of domiciliary or penal institutions.
    - k. General public.
    - l. Nonsexual household contacts of HIV-infected individuals.
  7. Confidentiality must be carefully maintained in accordance with all legal requirements.

#### References:

1. Morbidity and Mortality Weekly Report 35: 1843-1844, 1986.
2. Morbidity and Mortality Weekly Report 34:681-695, 1985.
3. Morbidity and Mortality Weekly Report 35:221-223, 1986.
4. Morbidity and Mortality Weekly Report 35:376-383, 1986.
5. Morbidity and Mortality Weekly Report 34:721-732, 1985.
6. Morbidity and Mortality Weekly Report 34:517-521, 1985.
7. Pediatrics 77:430-431, 1986.

## II.

The following are recommendations from the  
**Education Advisory Committee\***  
of the  
**Oklahoma State Health Department AIDS Task Force**  
Adopted 1986

- Recommendations — AIDS Education for the General Population
- Recommendations — AIDS Education for High Risk Groups
- Recommendations — AIDS Education in Public School
- Recommendations — AIDS Education for Health Care Workers

### Recommendations AIDS Education for the General Population

#### Statement of Need:

Available information about AIDS has stressed the fact that it is a serious disease with dire consequences, but one whose target population has been confined primarily to certain high risk groups—homosexual and bisexual men, intravenous drug users, hemophiliacs, people with antibody present due to transfusion-associated exposure to blood products, and sex partners of individuals in these groups.

However, it is becoming more apparent each day that AIDS is entering the general population — particularly through people who have multiple sexual partners and fail to take necessary precautions. Unfortunately, this fact is not well known and consequently there have been relatively few efforts to inform the group whose risk is dramatically increasing — the general public.

There is a desperate need for people in the general population to know their potential risk and what they can do to prevent this terrifying disease. Thus, a general education program must be mounted to communicate these facts. The specific message is that AIDS is primarily a sexually transmitted disease that can be passed on through both homosexual and *heterosexual* contact. It is no longer just a problem of certain high-risk groups but a threat to the general population as well.

#### Recommendations:

1. The first phase of a two-phased AIDS campaign would be a short-term, media-centered program featuring an AIDS awareness day/week/month where all available resources are brought to bear on the problem. This will involve a broad scale media program, governmental

- involvement and endorsement. Major commitments of time and resources for design, production and distribution of motivational materials will be required.
2. The second phase would be a longer range program directed to the community-at-large and would seek to carry on the impetus of the momentum gained in the initial phase of the program. This would feature targeting special groups within the community such as fraternities, sororities, community shelters, mental health organizations, service clubs, church groups, school organizations, etc. The long range program would be designed to complement other concurrent educational programs in the area such as school-based and high risk AIDS education programs. These presentations would be helpful in promoting the necessity of AIDS education in schools and in helping make these programs more acceptable to the general public. This could be accomplished by providing health department staff, a speakers' bureau, or other health educators in an on going effort.

### Recommendations AIDS Education for High Risk Groups

#### Statement of Need:

With a prediction that over a quarter of a million people will be affected by AIDS by the early 1990s, a monumental educational effort must be undertaken to reach all segments of the population. Certainly one place to begin should be high risk groups. These include homosexual and bisexual men, intravenous drug users, hemophiliacs and the sex partners of these persons.

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Two of these groups — the homosexual/bisexual men and the IV drug users — may not be as accessible through regular channels of education. Because of this, special steps need to be taken to inform these groups about AIDS prevention.

Also special efforts should be focused on newly emerging groups of persons at high risk for AIDS — sexually active heterosexuals and prostitutes. Both of these groups will be playing an increasingly important role in AIDS transmission and need to receive intensive AIDS education to protect not only their health, but the health of their sexual partners as well.

The following recommendations will require considerable effort but are believed to be the most effective manner of disseminating the correct information to these critical links in the chain of infection. Unless these groups can be adequately informed and educated, AIDS will undoubtedly continue its insidious spread through our society.

#### Recommendations:

1. Strategies of accessing both homosexual/bisexual men and IV drug users should be developed. Special outreach committees of experts and community members should be defined and their input used to determine not only the content of the educational material, but the various methods of reaching the target groups.
2. IV drug users may require additional efforts. Contact with drug rehabilitation clinics, support groups, jails, prisons, holding facilities, and areas that drug users are known to frequent, may provide appropriate means for establishing contact with persons in this high risk group.
3. In all high risk groups, safer sex practices and dangers of drug use should be specifically stressed using multi-media educational materials. These materials should be screened by a committee before publication whether printed materials, public service announcements, videos, films or other media are involved.

#### Recommendations AIDS Education in Public Schools

##### Statement of Need:

Experts have cautioned that the emergence of a new disease, particularly one that is transmissible, has always engendered public fear. With the recent discovery of Acquired Immune Deficiency Syndrome (AIDS), that fear has been exacerbated by uncertainty surrounding modes of HIV transmission and by the fact that once diagnosed, AIDS is nearly always fatal. These fears have contributed to the development of extremely negative attitudes toward persons with AIDS. Dissemination of accurate information to the public to combat these fears has been difficult.

It is important for the public to have accurate information regarding AIDS so that proper precautions may be taken in order to avoid contracting the disease. Use of these precautions will slow the spread of AIDS.

Experts have warned that AIDS may become a greater threat to the public at large, particularly if the public is not educated regarding disease transmission. This educational effort is also necessary to calm irrational fears regarding AIDS and its transmission and to help people become more comfortable when interacting with a person with AIDS.

Since the first cases were reported for Oklahoma in 1983, a total of 80 cases of AIDS have been reported in the state through October 31, 1986. Of this number, 35 cases were diagnosed and reported in 1986. With no known medical cure, the only available weapon to slow the spread of the disease is a massive educational effort directed at providing the public with information about AIDS and how it may be prevented.

#### Recommendations:

Surgeon General C. Everett Koop's report on AIDS released October 23, 1986 states: "Education about AIDS should start at an early age so that children can grow up knowing what behaviors to avoid to protect themselves from exposure to the AIDS virus."

One primary way to present information about AIDS is through the schools. Every school day more than 550,000 elementary and secondary students attend nearly 2,000 public schools in Oklahoma. Unbiased, non-sensational information can be presented by experts in the field to at least 90% of our young people. Proposals for doing this include:

1. **Teacher Education:**  
Teacher training programs should be provided by interagency collaboration between the school system, the Department of Education and Oklahoma public health agencies. The accuracy and appropriateness of the information received by professionals is essential to increasing the quality of instruction to students, families, and the community. Training efforts would be coordinated through recognized authorities in the educational and public health fields.
2. **Student Education:**  
Students should be given information concerning basic AIDS education with emphasis placed on the transmission of the HIV and precautions advised to prevent infection. This should be accomplished through age appropriate curricula, at the earliest grade levels possible, *but no later than middle school* and including all levels above middle school. A more intensive and comprehensive education program is strongly urged at the high school level.
3. **Parent Education:**  
The education students receive about AIDS should be reinforced at home. Parents will be encouraged to receive AIDS education to coincide with that provided to students by utilizing organizations such as Parent Teacher Associations and other programs for parents.
4. **Curriculum:**  
Concentrated educational efforts must include a school based program of curriculum development, professional training, community education and organized research. The curriculum developed should be implemented as a major component of existing health and hygiene programs or, when necessary, be the impetus for establishing such programs.

## Recommendations AIDS Education for Health Care Workers

### Statement of Need:

Health care workers are possibly at increased risk of acquiring HIV infection through exposure to potentially infectious blood and other body fluids. It is essential that this group receive appropriate education regarding transmission of HIV and protective measures needed to reduce the risk of exposure.

It is imperative that all who render health care be informed about AIDS. Knowledge of the recommended precautions for workers in all types of health care settings is needed to reduce fear and misinformation. This should assure that competent health care is available for persons with AIDS throughout Oklahoma.

Recognizing that unprotected exposure of the health care workers can occur before the detection of the HIV infection, further emphasis must be placed on educating direct care givers on the recognition of signs and symptoms encountered in patients with HIV infections.

The emotional impact of AIDS is also an important area to be covered with those providing care to persons infected with HIV. This information not only reassures the health care worker that she/he can safely care for the patient but also helps assure that the patient receives compassionate care.

Only through provisions of continuous factual and updated education can these needs be met. Assuring compliance with essential elements of staff education can, in many types of agencies, be accomplished through

licensing and certifying bodies. Every effort must be made to convince agencies of the importance of addressing these issues now.

### Recommendations:

1. All health care workers, including administrators and ancillary, should receive complete and current factual information regarding Acquired Immune Deficiency Syndrome, AIDS Related Complex, and transmission of HIV infection along with appropriate protective measures recommended. Those employees involved in direct patient care will require additional job specific education regarding AIDS. It is recommended that the "Guidelines for Prevention of Transmission of Human Immunodeficiency Virus in Health Care Settings" be used as a basis for educational programs for all persons employed in health care settings.
2. Health care providers in specific areas, with unique potential for exposure to the HIV virus, will also be educated to employ pertinent further measures for employee protection (e.g., surgical personnel, dialysis unit, laboratory, nursing, etc.). Adequate data will be provided regarding reasonable protection.
3. Agencies should adopt policies and procedures to be followed in patient care and then should educate workers in carrying out these measures.

Implementation of programs to educate health care workers should be the responsibility of the individual entities and organizations. However, accurate and timely information and expert consultants must be made available to institutions without these resources.

## III.

### The following are recommendations from the Health Care Services Advisory Committee\* of the Oklahoma State Health Department AIDS Task Force Adopted 1987

#### ■ Health Care Services Advisory Committee Report

#### Health Care Services Advisory Committee Report

#### Introduction:

In an attempt to address the needs of current and future Acquired Immunodeficiency Syndrome (AIDS) patients, to better educate the public regarding the syndrome, and to

prevent the spread of this disease, an interagency AIDS task force was formed. This advisory committee of that task force was assigned the responsibility for making recommendations toward enabling Oklahoma health providers to more efficiently and effectively plan to meet the challenges of providing for the needs of AIDS patients and their families.

#### \*Members:

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**Findings:**

The incidence of AIDS is projected to double on a yearly basis in Oklahoma over the next five years unless some major inroads are made in treatment and/or prevention. Appendix A includes statistical information documenting this projection. The vast majority of cases are found in the two largest urban areas, Oklahoma City and Tulsa. Because of the need for specialized health services the few patients from rural areas generally have migrated to one of these urban settings for care.

Professionals who regularly deal with AIDS patients are aware of available resources or are actively trying to identify resources where gaps in service exist. A concern was expressed regarding the needs of private practitioners and other medical providers who may not be knowledgeable of either the disease or the treatment network.

Some problems have also arisen regarding third party payment for care. The need to find resources to help AIDS victims retain insurance coverage associated with employment and the need to assure that insurance companies continue coverage were both mentioned.

Because of the nature of the illness, AIDS patients require a wide variety of health care and social services. These services, thus far, have not been formally coordinated. In some instances, patients do not know when and where help is available; in other instances there are no resources for the needed services. Some providers of services are also hesitant to fully serve the AIDS patients because of lack of understanding or fear of the disease.

**Spectrum of Services Needed for Persons with AIDS:**

A listing of those necessary services for AIDS patients was compiled by the Committee:

- Acute care hospitalization
- Out-patient services
- Physician visits
- Laboratory & x-ray
- Pharmacy
- Physical therapy
- Out-patient IV equipment
  - chemo
  - blood
  - antibiotics
  - hyperal
- Nutrition services
  - supplements
  - hyperal
- Legal services
  - living wills
  - power of attorney
  - guardianships
- Social services
  - income support
  - family counseling
  - case management
- Transportation
  - ambulatory
  - non-ambulatory
  - ambulance
- Special education
- Day care
- Home attendant and nursing

- Oxygen
- Medical equipment rental
- Extended care facilities
- Psychological services
- Dental care
- Room and board
- Post-mortem care

**Continuity of Care:**

Services must be systemically aligned so that persons in need of care can move through the system without constant reestablishment of eligibility or re-diagnosis, and receive the most adequate and suitable form of services which their needs dictate. Continuity implies that any agency is part of a broader network of services which assures that:

- A. The program will be coordinated with other agencies and with generic services in the community to assure that the needs of recipients are met;
- B. The service system will build on the assets of its consumers and their community support systems by increasing their collective capacity to function at the maximum in the least restrictive environment appropriate to meet the needs of the recipients;
- C. Recipients eligible for treatment in one service element will be eligible for services as needed in other elements of the network. Particular attention must be paid to recipients; who are or are about to be discharged from a hospital and are in need of post-hospital care.

**Recommendation:**

Foremost in the review of services necessary to meet the needs of AIDS patients and their families is the need for an interdisciplinary interorganizational service system. The Committee recommends that the Commissioner of Health appoints or requests that the Governor and Legislature appoint an entity to act as a convener to establish a network of coordinated services.

The committee further recommends the following goals for such a service system:

1. To strengthen the AIDS patients' independence, self-esteem and ability to participate in and contribute to community life;
2. To ensure continuity of care for patients;
3. To enable AIDS patients to access needed services, commensurate with their individual wishes and needs, regardless of where they reside in the state;
4. To prevent unnecessary institutionalization or the dislocation of individuals from their home communities;
5. To provide a range of services so that persons can receive these services in settings which do not unnecessarily restrict their liberty; and,
6. To encourage patients to move among settings as their needs change.

To accomplish these goals, agencies and private practitioners, including education, health, welfare, religious, law enforcement, voluntary and social services organizations, must coordinate activities to assure the provision of comprehensive services appropriate to the target population being served. Comprehensiveness does not require that each area of the state have a complete range of programs, or that one agency provide these programs.



It does require that basic programs be available for all target populations.

To accomplish this recommendation the Health Care Advisory Committee further recommends that:

- a geographically-based survey of available services including eligibility criteria be conducted;
- model letters of agreement be developed indicating cooperative activities and obligations;
- where problems in eligibility determination, diagnostic services, or service gaps are identified, negotiations take place to remove any barriers to accessing appropriate services;
- where program policies can be adjusted to meet the special needs of AIDS patients, agencies pursue appropriate changes;
- an information network, perhaps regional in nature, be coordinated from County Health Departments to facilitate private practitioners with questions regarding AIDS patients;
- third party funding sources be fully utilized in the care of AIDS patients; and
- studies should be conducted on cost of medical care, funding methods, and related topics dealing with the management of AIDS patients.

### Appendix A: AIDS Statistics and Preliminary Projections for Oklahoma

PROJECTED AIDS SURVIVAL (Estimated Living December 31, 1991) OKLAHOMA			
Year	Cases	Case Fatality Rate (%)	Surviving
1983	5*	100	0
1984	12*	100	0
1985	23*	100	0
1986	52*	100	0
1987	100	90	10
1988	200	85	30
1989	400	80	80
1990	800	60	320
1991	1600	30	1120
			Total 1560

\*denotes actual cases reported. Projections are based on the presumption the current rate of increase will continue (doubling approximately every 12 months), no significant changes in the rate of transmission among individuals at greatest risk, and no significant advances in medical therapy or development of a vaccine.

01-28-87

REPORTED AIDS CASES PROJECTIONS THROUGH 1991	
Year	Reported
1983	5*
1984	12*
1985	23*
1986	52*
1987	100
1988	200
1989	400
1990	800
1991	1600

Cases reported for the calendar year. \* denotes actual number of cases reported. Projections are based on the presumption the current rate of increase will continue (doubling approximately every 12 months), no significant changes in the rate of transmission among individuals at greatest risk, and no significant advances in medical therapy or development of a vaccine.

01-28-87

ACQUIRED IMMUNODEFICIENCY SYNDROME MONTHLY SURVEILLANCE REPORT — OKLAHOMA CUMULATIVE TOTALS December 31, 1986			
OKLAHOMA CASES REPORTED			
	Cases	Known Deaths	% Dead
Both KS and PCP	3	2	67%
KS without PCP	10	4	40%
PCP without KS	50	30	60%
Other Infections (without KS or PCP)	29	13	45%
Total	92	49	53%
AGE		RACE	
Under 5	1 1%	White	78 85%
5-12	— —	Black	10 11%
13-19	— —	Indian	2 2%
20-29	26 28%	Hispanic	2 2%
30-39	40 43%	Other	— —%
40-49	12 13%	Total	92 100%
Over 49	13 14%		
Total	92 100%		
SEX			
(Mean age 36 years)		Male	87 95%
		Female	5 5%
		Total	92 100%
TRANSMISSION CATEGORIES			
Homosexual or Bisexual Male	65	71%	
I.V. Drug User	5	5%	
Homosexual Male and I.V. Drug User	9	10%	
Blood Transfusion	5	5%	
Parent w/HIV Infection	1	1%	
Heterosexual Contact	1	1%	
None of the above/Other	6	7%	
Total	92	100%	

**ACQUIRED IMMUNODEFICIENCY SYNDROME  
MONTHLY SURVEILLANCE REPORT  
CUMULATIVE TOTALS  
January 5, 1987**

**UNITED STATES CASES REPORTED TO CDC**

PRIMARY DISEASE REPORTED	Cases	Known Deaths	% Dead
Kaposi's Sarcoma	3991	1725	43%
<i>Pneumocystis carinii</i> Pneumonia	18706	10815	58%
Other Opportunistic Infections	6440	3941	61%
Total	29137	16481	57%

AGE			RACE		
Under 5	361	1%	White	17378	60%
5-12	49	0%	Black	7272	25%
13-19	127	0%	Hispanic	4191	14%
20-29	6106	21%	Other &		
30-39	13639	47%	Unknown	296	1%
40-49	6018	21%	Total	29137	100%
Over 49	2837	10%			
Total	29137	100%			

SEX		
Male	26993	93%
Female	2144	7%
Total	29137	100%

**TRANSMISSION CATEGORIES**

Homosexual or Bisexual Men	18810	65%
I.V. Drug User	4903	17%
Homosexual Male and IV Drug User	2238	8%
Blood Transfusion	576	2%
Hemophilia/Coagulation Disorder	270	1%
Parent w/AIDS or increased risk	325	1%
Heterosexual Contact	1094	4%
None of the above/Other	921	3%
Total	29137	100%

**All AIDS Cases Per Million Population (from 1980 Census)  
by Standard Metropolitan Statistical Area (SMSA) of Residence  
Reported From June 1, 1981 thru December 31, 1986**

SMSA of Residence	Cases	Cases Per Million Population
New York City, NY	8501	932.1
San Francisco, CA	2913	896.3
Los Angeles, CA	2387	319.1
Houston, TX	938	322.3
Miami, FL	857	525.8
Washington, DC	800	261.4
Newark, NJ	712	361.4
Chicago, IL	636	89.6
Philadelphia, PA	532	112.7
Dallas, TX	495	166.7
Atlanta, GA	451	222.2
Boston, MA	429	155.4
Ft. Lauderdale, FL	338	331.4
Nassau-Suffolk, NY	335	128.4
Jersey City, NJ	330	589.3
Elsewhere, USA (irrespective of SMSA)	8483	47.9
U.S. Total	29137	126.6
Oklahoma City, OK	51	59.2
Tulsa, OK	25	33.6
Elsewhere, OK (irrespective of SMSA)	16	11.3
Oklahoma Total	92	30.4

Revised 01-21-87

**REPORTED CASES OF AIDS AND CASE-FATALITY RATES BY HALF-YEAR OF DIAGNOSIS  
OKLAHOMA AND UNITED STATES  
1979 thru December 31, 1986**

	Oklahoma			United States		
	Cases	Known Deaths	Case-Fatality Rate	Cases	Known Deaths	Case-Fatality Rate
Pre-1981	—	—	—	76	63	83%
1981 Jan-Jun	—	—	—	84	76	90%
Jul-Dec	—	—	—	177	158	89%
1982 Jan-Jun	—	—	—	361	310	86%
Jul-Dec	—	—	—	638	544	85%
1983 Jan-Jun	3	3	100%	1,199	1,018	85%
Jul-Dec	2	2	100%	1,566	1,289	82%
1984 Jan-Jun	4	4	100%	2,396	1,882	79%
Jul-Dec	8	6	75%	3,135	2,378	76%
1985 Jan-Jun	5	3	60%	4,246	2,854	67%
Jul-Dec	23	14	61%	5,238	2,835	54%
1986 Jan-Jun	26	11	42%	5,951	2,245	38%
Jul-Dec	21	6	29%	4,070	829	20%
1987 Jan-Jun	0	0	0	0	0	0
Total	92	49	53%	29,137	16,481	57%
01-21-87						

## VI.

### The following are recommendations from the **Law and Ethics Advisory Committee\*** of the **Oklahoma State Health Department AIDS Task Force** **Adopted 1987**

- **Ethical Guidelines of Responsibilities and Rights Related to AIDS**
- **Priority for HIV Serologic Testing upon Availability of Effective Treatment**
- **Proposed Rules to Deal with Health Problems Posed by Non-Compliant Carriers of Infectious Diseases**

#### **Ethical Guidelines of Responsibilities and Rights Related to AIDS**

1. At the current time, the only means of controlling the spread of AIDS and Human Immunodeficiency Virus (HIV) infection is through education directed at achieving behavioral changes. Every person has the responsibility to become knowledgeable about AIDS and HIV infection, how the infection is transmitted, and how it can be prevented.
2. Knowledge of HIV antibody status may be important in allowing a person to make decisions to prevent the transmission of HIV infection. Every person should have access to confidential, low cost testing and counseling for HIV infection, if he/she so desires.
3. Prevention of HIV infection in the health care setting requires that certain precautions be taken with relation to contact with blood and needles. Persons who have AIDS or HIV infection have a responsibility to provide information to their physician and other appropriate health care providers sufficient to allow them to take appropriate precautions.
4. Persons with AIDS or HIV infection are entitled to the same high quality health care as persons with any other illness. Health care providers have the responsibility to provide these services with the same compassion and value for life as a person with any other illness.
5. The diagnosis of AIDS necessitates a decision being made with regard to the use of heroic measures. This should be a joint decision between patient and physician.
6. AIDS is an infectious disease which is not transmitted by casual contact. Persons with AIDS or HIV infection have the same right to adequate housing and employment, free of discrimination on the basis of their infection, as any other person.
7. Persons with AIDS or HIV infection have the responsibility to become knowledgeable about the

infection and how it is transmitted and how it can be prevented, and the responsibility to take appropriate precautions to prevent the spread of that infection to others.

8. The future cure and prevention of AIDS and HIV infection will be found only through basic biologic research. Promotion of and participation in such responsible, scientific research should be encouraged in our state.
9. The high cost of caring for persons with AIDS, and the rapidly increasing number of cases will produce enormous economic impact. These realities dictate that suitable, compassionate and acceptable alternatives, which will be less costly, should be sought for the care of persons with AIDS.

#### **Priority for HIV Serologic Testing upon Availability of Effective Treatment**

As effective treatment for HIV infection becomes available it will be necessary to identify infected individuals, through testing, in order to bring them to treatment. It is clear that resources to accomplish wide scale screening, e.g., the entire population, will not be immediately available and thus a system will need to be established which prioritizes individuals or groups of individuals who should be tested. It should be understood that patients' confidentiality is assured.

Several considerations will come into play as such a system is established and it is virtually impossible to fully appreciate these until such time as we have an effective treatment. Factors which will need to be considered at the time of treatment availability include:

- An individual's likelihood of infection based upon current epidemiologic evidence of risk.
- Indications for the particular drug(s)

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- The risk/benefit ratio of the available drug
- Level of resources available at the time including testing facilities and materials and means of identifying and verifying those at risk, such as through contact tracing
- Necessity of required testing for general population groups such as premarital and prenatal testing
- In the event a drug which reduces infectivity becomes available it may be necessary to require testing in certain settings

While the overriding purpose of screening will be to initiate effective treatment, it will have the additional benefit of affording counseling to infected individuals as to the means of preventing transmission of HIV.

### Proposed Rules to Deal with Health Problems Posed by Non-Compliant Carriers of Infectious Diseases

#### Background

The Oklahoma State Board of Health has the statutory authority, pursuant to 63 O.S. 1981, §§1-106, 1-502, 1-504, 1-530 to promulgate rules and regulations, as it deems necessary, to aid in the prevention and control of communicable diseases. Such authority includes quarantine measures.

#### Definitions

As used in these rules and regulations, unless the context requires otherwise:

- A. The term "non-compliant behavior" includes all persons whose behavior is a serious public health threat, and contains the following criteria:
  1. the individual must be contagious or there must be reasonable cause to believe said person is contagious;
  2. the individual must know or should know that he is in a contagious state; and
  3. the individual must pose a public health risk by engaging in behavior known to spread the infection or disease.
- B. The term "quarantine" includes the limitation of movement, separation and segregation, during that period of time while infectious and contagious, from other persons not infected, in such places and under such conditions as will prevent the conveyance of such infectious or contagious condition to others not so infected. The period of quarantine shall be discretionary with the Commissioner but may only last as long as is necessary to ensure against the spread of the disease or until a medical determination has been made by the Commissioner that the quarantined person is no longer contagious.
- C. The term "contagious" requires that there is an ability to spread the disease or infection to another person. Thus, an illness due to a specific infectious agent may be transmitted, either directly or indirectly, to another person.

#### Application for Court Orders for the Management of Non-Compliant Persons with Communicable Diseases

- A. A sworn application for court order for the management of a non-compliant person with a communicable disease may be filed by the district attorney in the county in which the person resides or is found, or by the Attorney General, at the request of the Commissioner of Health. An affidavit of medical evaluation shall be filed with the application. Prior to entry into the judicial system, said non-compliant person must be informed by written order from the Oklahoma State Department of Health of his need to take appropriate precautions, including treatment where indicated, to reduce the risk of transmission of the infection. The person also must be informed of the consequences of his/her non-compliance with said order. The failure or refusal to comply with the written order shall be grounds to seek judicial redress.
  - B. The application shall be in writing and shall state the following upon information and belief of the health department:
    1. the name and address of the non-compliant person including the county of residence in this state, and
    2. that the person is infected with or is reasonably suspected of being infected with a communicable disease that presents a threat to the public health
    3. that such measure is necessary to control, suppress, or prevent the spread of said communicable disease.
  - C. The judge may, upon such application issue an Order of Protective Custody if the judge determines:
    1. that the Commissioner of Health has stated his/her opinion and the detailed basis for his/her opinion that the person is infected with or is reasonably suspected of being infected with a communicable disease that presents an immediate threat to the public health; and
    2. that the person fails or refuses or states his intention to refuse to comply with the written orders of the health department.
  - D. Said Order shall reflect that a hearing date has been set and the non-compliant person shall be notified of the hearing date.
  - E. The non-compliant person shall be entitled to the right to counsel, including court-appointed counsel if necessary who shall be appointed within 24 hours of the order. The non-compliant person shall have the right to present and cross-examine witnesses and to introduce evidence and shall be notified of these rights.
- #### Hearing of Protective Custody
- A. A hearing shall be held within 72 hours of the time detention begins pursuant to the order for protective custody; providing, however, that if the 72-hour period ends on a Saturday or Sunday or a legal holiday, the hearing shall be held on the first succeeding business day. The hearing may be postponed for an additional period not to exceed 24

hours upon good cause shown. At the hearing, the non-compliant person and his or her attorney shall have an opportunity to appeal and present evidence to challenge the allegation that the non-compliant person presents a substantial risk of serious harm to the non-compliant person or others. The court may consider evidence which possesses probative value including letters, affidavits, and other material. The state may prove its case on the health department's affidavit filed in support of the initial detention.

- B. If after the hearing, the court determines that the non-compliant person presents no substantial risk of serious harm to himself or others, the court shall order the non-compliant person's release. Otherwise, the non-compliant person shall remain in protective custody.
- C. Said proceedings, upon application by a party or at the discretion of the court, shall be closed to the public and all information shall be confidential.
- D. The standard of proof shall be clear and convincing evidence and the burden of proof shall be upon the State.
- E. The court may mandate additional testing as is necessary and may consider:
  - 1. evidence of the infectious status of the individual
  - 2. evidence of the non-compliant person's past behavior as well as expected future participation in non-compliant behavior.
    - a. sources of evidence regarding non-compliant behavior may include testimony by other participants in sexual activity, evidence from criminal proceedings, and testimony of expert witnesses.
    - b. the prosecuting attorney may grant immunity from prosecution to those who testify.

#### **Detention in Protective Custody**

The person detained in protective custody shall be detained in an appropriate in-patient health facility that has been designated by the Commissioner of Health.

#### **Hearing on Court Orders for the Management of a Non-Compliant Person with a Communicable Disease**

- A. The judge may hold the hearing on an Application for Court Order for the Management of a Non-Compliant Person with a Communicable Disease at any suitable place within the county. The hearing should be held in a physical setting not likely to have a harmful effect on the public or the person. Upon demand of the person or the person's attorney, the hearing shall be held in the courthouse of the county. The health authority shall advise the court on appropriate control measures to prevent transmission of the communicable disease alleged in the application.
- B. The non-compliant person shall have the right to be present, but his or her presence may be waived by the non-compliant person's or the non-compliant person's attorney.

#### **Modification of In-Patient Orders for the Management of a Non-Compliant Person with a Communicable Disease**

- A. After thirty (30) days have elapsed, or at the request of the health department, or the non-compliant person who has been committed for inpatient health services, and when just cause is demonstrated by the request, the court which entered the order may consider whether the order should be modified to provide for out-patient care. The request shall explain in detail why modification of the order is being requested and shall be accompanied by an affidavit by a physician based upon an examination conducted within the seven days immediately preceding the request.
- B. The non-compliant person shall be given notice of a request for modification of the order made pursuant to this section. If the non-compliant person or any other interested individual demands a hearing on the request, the court shall hold a hearing on the request. The court shall appoint an attorney to represent the non-compliant person at the hearing.

## **Coming in February . . .**

Among the manuscripts being considered for publication in February are a profile of Oklahoma's allopathic physicians and a report on the demographics of aging in the state, including its potential impact on the delivery of health care. Also being prepared is the next Leaders in Medicine story, scheduled for publication in February or March.

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## News from the Oklahoma State Department of Health

### Diabetes Patient Education

Diabetes mellitus affects about 1 in 20 Americans or an estimated 6 million people. It is a major cause of hospitalization, disability, and suffering and, with its complications, contributes to at least 7% of all deaths in the United States. Each year, 300,000 people with diabetes die. Complications strike many diabetics; 5,000 people lose their sight each year; over 10% develop some type of kidney disease; and about 45% of all nontraumatic leg and foot amputations are caused by diabetes. Also, people with diabetes are two to four times more likely to have heart disease or suffer a stroke.

The complications of diabetes and premature mortality, however, are inevitable. Several variables can affect complications and premature mortality: (1) modern therapies; (2) better self-care diabetes

management; and (3) patient education on diabetes survival skills, management, and life-style behaviors.

Outpatient diabetes education is an accepted part of diabetes care. The Diabetes Program of the Oklahoma State Department of Health offers community-based patient education programs in 12 county health departments.

The overall mission of the program is to prevent the serious disabling complications in diabetes. The program is targeted to reach rural people who have noninsulin dependent diabetes. The program components are designed to complement and support local physicians who maintain medical supervision for the person with diabetes.

The "I'm in Control" education course accepts the patient after referral from his/her physician for a learning needs assessment. The assessment determines which of the eight course modules are best suited for the individual. The modules cover disease process, self-blood glucose monitoring, medications, nutrition, stress, exercise, and community resources. The eighth module is on diabetes and pregnancy. If you have patients with diabetes and in need of patient education, contact the Diabetes Program at 405/271-4072 for assistance. □

DISEASE	October 1987	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	8	7	10
CAMPYLOBACTER INFECTIONS	14	216	233	—
ENCEPHALITIS, INFECTIOUS	3	22	20	27
GIARDIA INFECTIONS	23	164	208	—
GONORRHEA (Use ODH Form 228)	661	8322	10753	11383
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	26	145	196	—
HEPATITIS A	26	225	302	424
HEPATITIS B	17	202	172	206
HEPATITIS, NON-A-NON-B	4	37	50	—
HEPATITIS UNSPECIFIED	6	30	40	117
MEASLES (RUBEOLA)	1	4	39	16
MENINGITIS, ASEPTIC	9	139	114	166
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	2	30	59	53
MENINGOCOCCAL INFECTIONS	3	21	27	26
PERTUSSIS	22	147	116	165
RABIES (Animal)	2	33	57	101
ROCKY MOUNTAIN SPOTTED FEVER	2	82	97	121
RUBELLA	0	5	0	1
SALMONELLA INFECTIONS	51	400	420	400
SHIGELLA INFECTIONS	10	132	188	241
SYPHILIS (Use ODH Form 228)	22	151	134	156
TETANUS	0	1	1	1
TUBERCULOSIS	22	194	217	216
TULAREMIA	0	24	11	21
TYPHOID FEVER	1	5	2	3

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	186
BRUCELLOSIS	5
LEGIONNAIRES DISEASE	21
MALARIA	3
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	18

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*State legislatures introduce 450 bills*

## **AIDS alert generates mass of regulations**

Serious public health concerns prompted the introduction of more than 450 AIDS-related bills in state legislatures across the nation in 1987 alone, according to a year-end report.

The review was prepared by Hilary E. Lewis, JD, of the Department of State Legislation, Division of Legislative Activities, American Medical Association. Lewis looks at all AIDS-related legislation enacted prior to October 6, 1987, in the following areas: antibody testing, blood, confidentiality, employment, housing, informed consent, insurance, marriage, prison populations, and reporting. The first AIDS-related laws appeared in 1983 and focused mainly on statewide task forces created for public information and education, Lewis reports.

It is important to note that "state regulation constitutes another means by which policymakers have responded to the AIDS crisis," writes Lewis. Examples of such regulation include public health department reporting guidelines and those of various state commissioners of insurance. These carry what the author calls "the force of law."

In addition to listing the 10 categories mentioned above and itemizing the various state statutes, the report provides a detailed chart of the 50 states and any legislation that exists in any of the 10 areas. The chart, however, does not include state regulations. It shows that confidentiality and reporting laws are extant in most states and far outnumber other categories. Informed consent, housing, and employment laws are least common.

Patient confidentiality has been a point of controversy virtually since the first AIDS cases were reported. California and New York carry certain prohibitions on release of information. In some states, laws relate to individuals; in other states the constraints involve public health records. Some laws address actual AIDS or ARC (AIDS-related complex),

while others relate to presence of the human immunodeficiency virus (HIV) antibody.

"In all 50 states, confirmed cases of AIDS constitute a reportable condition either by statute or administrative regulation," the author notes. In

*(continued)*



**Lanny F. Trotter, MD**, Stillwater, vice-chairman of the OSMA Board of Trustees, chairs their November 15 meeting, his last. Dr Trotter has subsequently relocated his practice to Moultrie, Ga, inviting all his OSMA friends to drop by whenever they are in the area.



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## Fourteen get nod of approval for Life Membership in OSMA

Fourteen members of the Oklahoma State Medical Association were approved for Life Memberships last fall. The approval came from the OSMA Board of Trustees at its September 13 meeting.

The new Life Members from Oklahoma City are Scott Hendren, MD; Melvin C. Hicks, MD; Coye M. McClure, MD; William G. McCreight, MD; Samuel T. Moore, MD; J.W. Morrison, MD; Edward R. Munnell, MD; Jerome D. Shaffer, MD; Hugh A. Stout, MD; and Lorraine M. White, MD.

Also named were Paul A. Bischoff, MD, Tulsa; Malcolm Mollison, MD, Altus; Antone C. Fina, MD, Atoka; and Donald H. Olson, MD, Vinita.


To be eligible for a Life Membership, an OSMA member must meet one or more of the following qualifications: (1) Be retired from the active practice of medicine due to age or ill health; (2) Be engaged in the active practice of medicine for fifty years or more; (3) Be seventy years of age or older. 

## AIDS regulations (continued)

describing only laws (as opposed to administrative regulation) relating to reporting, Lewis details 17 approaches to the topic. Nearly half the states in the nation have some law on the books that addresses the issue of reporting. In some states the issue of reporting is the only one that merited the attention of actual legislation.

California has, by far, the most laws on the issue, with nine, including statutes covering such areas as blood, confidentiality, employment, housing, informed consent, insurance, marriage, and reporting. Florida has seven AIDS-related laws, and Illinois has five. Several states have three or four.

It is also interesting that many of the 10 categories mentioned by the author overlap. In addition, some categories could have been combined in different ways or other categories could have been established. Housing and employment categories, for instance, also relate to discrimination. Employment relates to blood testing and confidentiality. Housing has aspects of consent and confidentiality as well.

The report appears in the November 6 issue of the *Journal of the American Medical Association*. 

## Pregnant women in inner city at greater risk

A recent study indicates human immunodeficiency virus (HIV) infection could become a "significant problem" among pregnant women in America's inner cities, with seroprevalence rates that may compare with those reported in some hospitals in central Africa. Broader HIV counseling and testing of such women may be needed, the study suggests.

The study, by Sheldon Landesman, MD, of the State University of New York Health Science Center at Brooklyn, NY, and colleagues, found 2% of a sample of women delivering infants at their inner-city hospital were infected with HIV. This rate is "several times higher than that of many other diseases for which screening is already routine" — including herpes, congenital rubella, and neural tube defects, the authors say.

"This serosurvey indicates that HIV infection of inner-city (pregnant women) is a significant problem that warrants broadly implemented health strategies," they conclude. "In areas with significant seroprevalence rates of HIV infection, a broader counseling and testing program may be needed."

The researchers studied 602 umbilical cord blood samples from infants delivered at Kings County Hospital Center, a 1,200-bed municipal hospital serving a largely minority population, between December 8, 1986, and January 31, 1987. Demographic and HIV risk factor information was also collected from the infants' mothers.

Twelve of the 602 samples (2%) were positive for HIV. In interviews, however, only seven of the seropositive women reported HIV risk factors. "This suggests that 'if risk factor information elicited by physicians is used to initiate HIV antibody counseling and testing of pregnant women, a significant number of seropositive (women) is missed,'" the study reports.

The authors say they know of no published rates of HIV seropositivity from comparable hospitals in the United States, but note that their 2% rate is similar to published data from Nairobi, Kenya (although the rate of births to seropositive women in Kinshasa, Zaire, is reported at 8%). "It is reasonable to assume that the seroprevalence of HIV at (the study hospital) is not unique among certain hospitals in New York or other areas where AIDS is commonly diagnosed in women," they say.

"We believe that HIV testing should be routinely

offered to all pregnant women in a situation where there is a combination of high seroprevalence and poor identification of people at risk," the study says. "Such testing must be accompanied by counseling, consent, and appropriate provisions for privacy."

Similar infection surveillance studies are needed in obstetric and family planning clinics, sexually transmitted disease clinics, and abortion clinics around the country, the authors say. This will allow creation of appropriate HIV counseling and testing programs directed at women of childbearing age.

Commenting editorially, Michael T. Osterholm, PhD, MPH, and Kristine L. MacDonald, MD, of the Minnesota Department of Health, Minneapolis, say that while children with AIDS were recognized early on, "the impact of pediatric AIDS on clinical medicine and society in general is only now being fully appreciated."

*(continued)*

### Unwilling to treat AIDS patient?

## MD says get out of kitchen if you can't stand the heat

Health care personnel unwilling to work with "high risk" patients or specimens — like those involving human immunodeficiency virus (HIV) — despite expert counseling and safeguards, "should be advised to seek a change of career," says an editorial in November's *Archives of Pathology and Laboratory Medicine*.

Those who choose to work with the sick "have always faced a small but real possibility of illness or death as a result," Eugene L. Gottfried, MD, a pathologist at San Francisco General Hospital, writes. He says medical personnel at his hospital, after six years of close work with AIDS, "are accustomed to performing their duties with care but not terror."

While there are reports of seroconversions among some health workers exposed to HIV-infected blood, Gottfried says an ongoing study of 600 San Francisco General personnel, including many who work closely with HIV-infected patients, shows no seroconversions so far among those with no other risk factors.





## Pregnant women (continued)

The study results are "sobering," adding to the evidence of "an emerging shift in the sociodemographic pattern of HIV infection in this country," the editorial adds. While many might dismiss the findings as being of limited importance outside New York City, the authors note that early in the HIV epidemic, many clinicians and public health officials believed AIDS in gay men would be a major problem only in certain major east and west coast cities.

"Today, the 'Heartland' is repeating the experience of those coastal metropolitan communities with regard to AIDS in gay men," Osterholm and MacDonald write. "We need to recognize that HIV infection in women and the resultant cases of pediatric AIDS will likely unfold as a similar story in selected urban populations throughout the United States."

In a related report, Howard L. Minkoff, MD, also of SUNY-Brooklyn, outlines factors that must be considered in caring for pregnant women infected

with HIV. Both the Centers for Disease Control and the American College of Obstetricians and Gynecologists have recommended that pregnant women at increased risk for AIDS be tested for HIV antibodies, and in implementing this recommendation, Minkoff notes, "some clinicians who undoubtedly have had limited experience with patients infected with (HIV) will be responsible for the care of a large number of pregnant women found to be asymptotically infected with (HIV)."

"Obstetricians, midwives, and all clinicians interfacing with pregnant women must be prepared to deal with issues of counseling, clinical management of potential HIV-associated complications during pregnancy, and intrapartum and postpartum care and infection control," he writes. "Counseling efforts must take into account the patients' particular cultural sensitivities."

The reports and commentary appeared in the November 20 issue of the *Journal of the American Medical Association*. □



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## Doctor, lawyer remind peers of higher duties

Doctors and lawyers, "as a matter of ethics and good faith," should voluntarily contribute at least 50 hours of professional time annually to work with the poor, the editors of the *Journal of the American Medical Association (JAMA)* and the *ABA Journal* wrote in a recent joint editorial.

*JAMA* editor George D. Lundberg, MD, and *ABA Journal* editor Laurence Bodine, Esq, in their unique joint editorial, note that many doctors and lawyers do contribute free time to the poor, "but not enough. What percentage of their time is spent doing so? Much, but not enough.

"Doctors and lawyers in our society have benefited greatly from the abundant opportunities made available to them from the fruits of our plenty," says the editorial. "We believe that all doctors and all lawyers, as a matter of ethics and good faith, should contribute a significant percentage of their total professional efforts without expectation of financial remuneration.

"This percentage will vary depending on time, setting, opportunity, and need, but all should give something. This is the proper behavior of a learned professional. We believe that 50 hours a year — or roughly one week of time — is an appropriate minimum," the editors write.

"Doctors and lawyers today have tended to become overly concerned with their professional incomes and practice efficiencies, but they must not forget their higher duties," they say. "Many members of our professions have always cared for the poor who need legal or medical help. But their efforts are not what they should be, and there is abundant evidence of unmet needs."

For example, they note, 35 to 50 million Americans are now believed to be medically uninsured or seriously underinsured. In addition, the American Bar Foundation figures that the services of a lawyer are not used for 68% of legal problems encountered by poor people.

The editorial appeared in both the December 4 issue of *JAMA* and in the American Bar Association's December *ABA Journal*.


In a related commentary, David Hilfiker, MD, of the Community of Hope Health Services and the Christ House Medical Recovery Shelter, Washington, DC, says a doctor working with the poor can treat acute conditions but not chronic social needs. "It is

not easy to open ourselves to the pain, suffering, and vulnerability of the poor," Hilfiker says. "We have to confront our own limitations. We know that it does little good to offer a medication when our patient needs a home, a meal, a family, love, money and a thousand other things that we ourselves take for granted. We also confront the limitations of a society that refuses to accept responsibility for its broken ones. And so it is tempting to turn away, offering nothing, sparing ourselves the deep frustration."

Hilfiker, saying medicine has "largely abandoned the poor," challenges his colleagues to "bring the poor into our practices. . . I am beginning to realize that we in medicine need the poor to bring us back to our roots as a servant profession."

A related report in *JAMA's* Medical News and Perspectives section looks at some of the ways physicians are providing charity care. It cites an AMA report based on 1987 socioeconomic data as indicating that "17.6 percent of all (US) physicians are providing uncompensated care to individuals outside their regular practices, spending an average of 4.4 hours per week in providing such free care." This measure may actually underestimate the total amount of uncompensated care provided, the report adds.

When the Medical News and Perspectives staff contacted state and local medical associations for information about charity care by physicians, "the result was such a flood of information that only a few of the individual and group contributions (could) be reported in the space available," the report says.



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## Investment of 32 minutes a day pays dividends

Moderate leisure time physical activity can reduce by more than one-third the risk of coronary heart disease mortality and sudden death in middle-aged men at high risk for heart trouble, concludes a recent study.

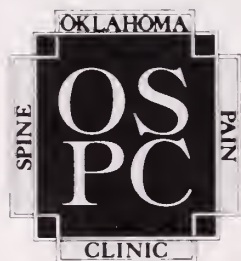
The risk differences persist even after adjusting for possible confounding variables, including other baseline risk factors, according to the study by Arthur S. Leon, MD, of the University of Minnesota, Minneapolis, and colleagues. The associations between total leisure time physical activity and combined fatal/nonfatal heart attack risk and overall mortality both were weaker, however, than that for fatal coronary heart disease, the authors say.

The study analyzes the relation between leisure time physical activity and first major coronary disease events (fatal or nonfatal heart attacks) and overall mortality in 12,138 middle-aged men taking part in the Multiple Risk Factor Intervention Trial

(MRFIT), a long-term study of heart disease risk factors. Leisure activity was categorized according to amount of time involved daily as "light" (an average of 15 minutes per day), "moderate" (average of 47 minutes) or "high" (134 minutes).

Study subjects reported an assortment of leisure activities, with yard work and gardening, walking, and home repairs among those most frequently cited. The most common sports reported were water sports, especially swimming; other popular activities were dancing, golf, bowling, biking, hunting, and fishing. Jogging or running, included under "conditioning exercises," were reported by relatively few subjects: just 6% of those in the "light" category, 11% among the moderates, and 18% in the "high" activity category.

During seven years of follow-up, the study finds, the moderately active men had a 37% lower age-adjusted risk of coronary heart disease-related



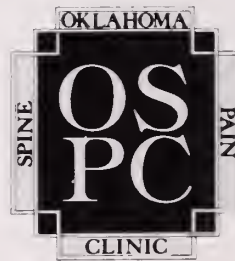
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mortality and sudden death, than the least active men. They also had a 30% lower risk of overall mortality.

Men reporting "high" leisure time activity had a 20% lower risk of combined fatal and nonfatal heart attacks than the least active group. However, mortality rates in the "high" activity group were similar to those among men reporting moderate activity. "Thus," the authors say, "it appears that a relatively small mean gradient of 32 minutes per day between (the sedentary and moderately active groups) was associated with reduction in (coronary heart disease) and overall mortality. Additional physical activity beyond a mean of about an hour a day was not associated with any additional reduction in mortality rates."

However, the researchers add, it's possible that unknown factors could influence both leisure activity habits and rates of coronary heart disease mortality and overall mortality. "These data do not exclude the possibility that more vigorous regular exercise could further reduce (coronary heart disease) incidence and mortality rates since very few of the men in this study had such an exercise program," they emphasize.

The authors conclude that their data "showed that men at high risk for (coronary heart disease) who self-selected moderate amounts of predominantly light and moderate nonwork physical activity had lower rates of (coronary heart disease) mortality than more sedentary men. The principal mechanism

may be the effects of improved physical fitness on the heart. Additional potential benefits of regular physical activity include helping maintain body weight, as a substitute for cigarette smoking, and for increasing high-density lipoprotein cholesterol levels, lowering of blood pressure levels, and improved glucose-insulin dynamics.

"Since physical activity habits are commonly established early in life, a population strategy to enhance physical activity throughout the lifespan appears appropriate to help prevent (coronary heart disease) and promote health and longevity."

The report appeared in the November 6 issue of the *Journal of the American Medical Association*.



# DEATHS

**Donald Owen Walker, MD**  
**1938 - 1987**

Donald O. Walker, MD, a family practitioner in Purcell, died July 21, 1987. Dr Walker, a native of Konawa, was graduated from the University of Oklahoma College of Medicine in 1974 and opened his practice in Purcell a year later. He served as vice-president of the Cleveland-McClain County Medical Society in 1980.

# IN MEMORIAM

1987

Charles Sylvanus Maben, MD	February 13	Paul Newman Atkins, Jr., MD	April 20
Edward Leon Moore, MD	February 14	John Wesley Williams, MD	May 16
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Paul Lewis Nave, MD	March 26	Thomas Arthur Hosty, MD	June 17
George Michael Willkom III, MD	March 30	Dan Cross Galloway, MD	July 12
Odis A. Cook, MD	April 4	Donald Owen Walker, MD	July 21
Lawrence Edward Silvey, MD	April 9	Alwin Marshal Clarkson, MD	September 1
Victor Gary Anderson, MD	April 10	Rex Elmer Kenyon, MD	September 16
Edgar W. Young, Jr., MD	April 12	Charles P. Bondurant, Jr., MD	October 12



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*With cytologic analysis*


## Needle aspiration may reduce need for breast biopsies

Despite mammography's usefulness in spotting early breast tumors too small to be felt by physical examination, no more than 25% of resulting surgical breast biopsies turn out to show cancerous lesions.

However, a report in the November *Archives of Surgery* says a new diagnostic technique, in which an x-ray-guided needle samples tumor cells for laboratory analysis, may reduce the need for many of these "open" biopsies.

Kambiz Dowlatshahi, MD, now of Rush Presbyterian-St. Luke's Medical Center, Chicago, and colleagues at the University of Chicago Pritzker School of Medicine, used this technique, called stereotaxic fine-needle aspiration and cytologic

analysis, to examine 84 women with abnormal mammograms. The researchers guided the sampling needle to within 1 to 2 mm of the suspected lesion in 80 cases; resulting cytologic analysis correctly identified 11 of 12 breast cancers (all cases were confirmed by standard biopsy).

"We expect that stereotaxic needle aspiration and cytologic analysis of mammographically detected breast lesions will reduce the need for breast biopsy, thus lowering the threshold of fear in women and indirectly encouraging them to participate more readily in regular screening programs," the authors conclude. 

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## BOOK SHOP

### **Infections of the Gastrointestinal Tract: Microbiology, Pathophysiology, and Clinical Features.** By Hubert L. DuPont and Larry K.

Pickering. New York: Plenum Publishing Co., 1980. pp 266. \$24.50.

This small book is a gold mine of information about infectious diarrhea. Enteric infection plays an important role in the majority of the world's populations; its effect is particularly profound in areas of the world with reduced economic development where there also exists a great reservoir of enteropathogens and a large susceptible population with nutritional deficits. In many parts of the Third World, diarrhea and its complications are the leading cause of death in infants and young children and account for as much as one-third of all pediatric deaths. Thus, the subject of this monograph is an important one.

The book consists of eleven chapters. The first chapter, "The New Mechanisms in Infectious Diarrhea," discusses both nonspecific and specific gastrointestinal immune and operative mechanisms, as well as enteric infections. A major portion of the book consists of chapters dealing with individual microbial agents and the infections they produce, including amebiasis, giardiasis, bacillary dysentery, salmonellosis, cholera, and *Escherichia coli*. There is also a condensed review of selected viral agents including rotaviruses and Norwalklike agents. Most

of these chapters have subsections devoted to microbiology, pathophysiology, epidemiology, clinical features, diagnosis, and management.

Other chapters deal with more general topics, including travelers' diarrhea, diagnosis and treatment of acute diarrhea, fluid and dietary management of acute diarrhea, and the relative importance of enteropathogens in diarrheal illness.

Each chapter contains a large number of references, most of which are quite up-to-date.

The content of this monograph exhibits an excellent intermixing of basic science and practical information. Most of the practical pathogens of the intestinal tract are treated in an encyclopaedic fashion. Surprisingly, there is no mention of *Clostridium difficile* and its role in the production of antibiotic-related colitis.

This book is highly recommended.

Harris D. Riley, Jr., MD  
Oklahoma City

**Textbook of Pediatric Rheumatology.** By James T. Cassidy. New York: John Wiley & Sons, Inc., 1982. Pp 684, illus, price \$47.50.

The general public and, for that matter, many physicians hold the mistaken belief that chronic arthritis affects only adults, especially the elderly. In the preface, Dr Cassidy states, "We have waited

20 years to write this book. Fortunately, those years have given us the opportunity to gain a deeper understanding of pediatric rheumatology. . . . Physicians who are actively involved in caring for children afflicted with rheumatic diseases need a single volume that provides the information central to an understanding of pediatric rheumatology and the modern approaches to diagnosis and treatment of such disorders. This has been our goal in writing this book."

Cassidy, of the University of Michigan School of Medicine, and four contributors have put together a comprehensive book dealing with rheumatic diseases in children. They have focused on juvenile rheumatoid arthritis, juvenile ankylosing spondylitis, systemic lupus erythematosus, dermatomyositis, scleroderma, and systemic vasculitis. Nonpediatricians will be surprised at the incidence of the rheumatic diseases, including juvenile rheumatoid arthritis.

The book is divided into 16 chapters. Chapter 1 presents a discussion of the definition, types, and incidence of rheumatic diseases in children, as well as the unique pediatric factors that modify rheumatic diseases. The next four chapters review concepts fundamental to an understanding of rheumatic diseases in children, including epidemiology, pathogenesis of the autoimmune diseases, basic concepts of drug therapy, and the association of rheumatic diseases with various types of immunodeficiency.

This is followed by six chapters providing current knowledge of the major connective tissue disorders in children. In general, the material is comprehensive, current, and well organized. These chapters are followed by two dealing with infectious arthritis and

reactive arthritis. There is a very useful chapter on the differential diagnosis of musculoskeletal pain and the many nonrheumatic disorders that present with joint symptoms. This is to remind the pediatric rheumatologist of the tasks that he may encounter in making a correct diagnosis. There is also a chapter regarding the organization of the pediatric rheumatology clinic and the role of the pediatric rheumatologist and the other members of the clinic team. The final chapter discusses special laboratory diagnostic studies and is a useful review.

A strong feature of the book are its many tables. The illustrations are technically excellent, and those in color enhance the interpretation of various clinical findings.

This is a balanced overview of the subject. As Dr Cassidy states in the preface, "Rheumatology is not an area well understood by physicians. . . ." He and his collaborators have provided much clarification. It is a well done book.

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**CONTRAINDICATIONS:** Hypersensitivity to trimethoprim or sulfonamides, documented megaloblastic anemia due to folate deficiency, pregnancy at term and during the nursing period, infants less than two months of age

**WARNINGS: FATALITIES ASSOCIATED WITH THE ADMINISTRATION OF SULFONAMIDES, ALTHOUGH RARE, HAVE OCCURRED DUE TO SEVERE REACTIONS, INCLUDING STEVENS-JOHNSON SYNDROME, TOXIC EPIDERMAL NECROLYSIS, FULMINANT HEPATIC NECROSIS, AGRANULOCYTOSIS, APLASTIC ANEMIA AND OTHER BLOOD DYSCRASIAS**

**BACTRIM SHOULD BE DISCONTINUED AT THE FIRST APPEARANCE OF SKIN RASH OR ANY SIGN OF ADVERSE REACTION.** Clinical signs, such as rash, sore throat, fever, pallor, purpura or jaundice, may be early indications of serious reactions. In rare instances a skin rash may be followed by more severe reactions, such as Stevens-Johnson syndrome, toxic epidermal necrolysis, hepatic necrosis or serious blood disorder. Perform complete blood counts frequently

**BACTRIM SHOULD NOT BE USED IN THE TREATMENT OF STREPTOCOCCAL PHARYNGITIS.** Clinical studies show that patients with group A  $\beta$ -hemolytic streptococcal tonsillopharyngitis have a greater incidence of bacteriologic failure when treated with Bactrim than with penicillin.

**PRECAUTIONS:** General: Give with caution to patients with impaired renal or hepatic function, possible folate deficiency (e.g., elderly chronic alcoholics, patients on anticonvulsants, with malabsorption syndrome, or in malnutrition states) and severe allergies or bronchial asthma. In glucose-6-phosphate dehydrogenase deficient individuals, hemolysis may occur, frequently dose-related

**Use in the Elderly:** May be increased risk of severe adverse reactions in elderly, particularly with complicating conditions, e.g., impaired kidney and/or liver function, concomitant use of other drugs. Severe skin reactions, generalized bone marrow suppression (see WARNINGS and ADVERSE REACTIONS) or a specific decrease in platelets (with or without purpura) are most frequently reported severe adverse reactions in elderly. In those concurrently receiving certain diuretics, primarily thiazides, increased incidence of thrombocytopenia with purpura reported. Make appropriate dosage adjustments for patients with impaired kidney function (see DOSAGE AND ADMINISTRATION)

**Use in the Treatment of Pneumocystis Carinii Pneumonitis in Patients with Acquired Immunodeficiency Syndrome (AIDS):** Because of unique immune dysfunction, AIDS patients may not tolerate or respond to Bactrim in same manner as non-AIDS patients. Incidence of side effects, particularly rash, fever, leukopenia, with Bactrim in AIDS patients treated for *Pneumocystis carinii* pneumonitis reported to be greatly increased compared with incidence normally associated with Bactrim in non-AIDS patients

**Information for Patients:** Instruct patients to maintain adequate fluid intake to prevent crystalluria and stone formation.

**Laboratory Tests:** Perform complete blood counts frequently; if a significant reduction in the count of any formed blood element is noted, discontinue Bactrim. Perform urinalyses with careful microscopic examination and renal function tests during therapy particularly for patients with impaired renal function

**Drug Interactions:** In elderly patients concurrently receiving certain diuretics, primarily thiazides, an increased incidence of thrombocytopenia with purpura has been reported. Bactrim may prolong the prothrombin time in patients who are receiving the anticoagulant warfarin. Keep this in mind when Bactrim is given to patients already on anticoagulant therapy and reassess coagulation time. Bactrim may inhibit the hepatic metabolism of phenytoin. Given at a common clinical dosage, it increased the phenytoin half-life by 39% and decreased the phenytoin metabolic clearance rate by 27%. When giving these drugs concurrently be alert for possible excessive phenytoin effect. Sulfonamides can displace methotrexate from plasma protein binding sites, thus increasing free methotrexate concentrations

**Drug/Laboratory Test Interactions:** Bactrim, specifically the trimethoprim component, can interfere with a serum methotrexate assay as determined by the competitive binding protein technique (CBPA) when a bacterial dihydrofolate reductase is used as the binding protein. No interference occurs if methotrexate is measured by a radioimmunoassay (RIA). The presence of trimethoprim and sulfamethoxazole may also interfere with the Jaffe alkaline picrate reaction assay for creatinine, resulting in overestimations of about 10% in the range of normal values

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** **Carcinogenesis:** Long-term studies in animals to evaluate carcinogenic potential not conducted with Bactrim. **Mutagenesis:** Bacterial mutagenic studies not performed with sulfamethoxazole and trimethoprim in combination. Trimethoprim demonstrated to be nonmutagenic in the Ames assay. No chromosomal damage observed in human leukocytes *in vitro* with sulfamethoxazole and trimethoprim alone or in combination, concentrations used exceeded blood levels of these compounds following therapy with Bactrim. Observations of leukocytes obtained from patients treated with Bactrim revealed no chromosomal abnormalities. **Impairment of Fertility:** No adverse effects on fertility or general reproductive performance observed in rats given oral dosages as high as 70 mg/kg/day trimethoprim plus 350 mg/kg/day sulfamethoxazole

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**Nursing Mothers:** See CONTRAINDICATIONS section

**Pediatric Use:** Not recommended for infants under two months (see INDICATIONS and CONTRAINDICATIONS sections)

**ADVERSE REACTIONS:** Most common are gastrointestinal disturbances (nausea, vomiting, anorexia) and allergic skin reactions (such as rash and urticaria). **FATALITIES ASSOCIATED WITH THE ADMINISTRATION OF SULFONAMIDES, ALTHOUGH RARE, HAVE OCCURRED DUE TO SEVERE REACTIONS, INCLUDING STEVENS-JOHNSON SYNDROME, TOXIC EPIDERMAL NECROLYSIS, FULMINANT HEPATIC NECROSIS, AGRANULOCYTOSIS, APLASTIC ANEMIA AND OTHER BLOOD DYSCRASIAS (SEE WARNINGS SECTION)**

**Hematologic:** Agranulocytosis, aplastic anemia, thrombocytopenia, leukopenia, neutropenia, hemolytic anemia, megaloblastic anemia, hypoprothrombinemia, methemoglobinemia, eosinophilia. **Allergic Reactions:** Stevens-Johnson syndrome, toxic epidermal necrolysis, anaphylaxis, allergic myocarditis, erythema multiforme, exfoliative dermatitis, angioedema, drug fever, chills, Henoch-Schoenlein purpura, serum sickness-like syndrome, generalized allergic reactions, generalized skin eruptions, photosensitivity, conjunctival and scleral injection, pruritus, urticaria and rash. **Periarthritis nodosa and systemic lupus erythematosus** have been reported. **Gastrointestinal:** Hepatitis (including cholestatic jaundice and hepatic necrosis), elevation of serum transaminase and bilirubin, pseudomembranous enterocolitis, pancreatitis, stomatitis, glossitis, nausea, emesis, abdominal pain, diarrhea, anorexia. **Genitourinary:** Renal failure, interstitial nephritis, BUN and serum creatinine elevation, toxic nephrosis with oliguria and anuria, crystalluria. **Neurologic:** Aseptic meningitis, convulsions, peripheral neuritis, ataxia, vertigo, tinnitus, headache. **Psychiatric:** Hallucinations, depression, apathy, nervousness. **Endocrine:** Sulfonamides bear certain chemical similarities to some gonitrogens, diuretics (acetazolamide and the thiazides) and oral hypoglycemic agents; cross-sensitivity may exist. Diuresis and hypoglycemia have occurred rarely in patients receiving sulfonamides. **Musculoskeletal:** Arthralgia, myalgia. **Miscellaneous:** Weakness, fatigue, insomnia

**DOSAGE AND ADMINISTRATION:** Not recommended for use in infants less than two months of age.

**URINARY TRACT INFECTIONS AND SHIGELLOSIS IN ADULTS AND CHILDREN, AND ACUTE OTITIS MEDIA IN CHILDREN:** Usual adult dosage for urinary tract infections is one DS tablet, two tablets or four teaspoonfuls (20 ml) b.i.d. for 10 to 14 days. Use identical daily dosage for 5 days for shigellosis. **Recommended dosage for children** with urinary tract infections or acute otitis media is 8 mg/kg trimethoprim and 40 mg/kg sulfamethoxazole per 24 hours, in two divided doses every 12 hours for 10 days. Use identical daily dosage for 5 days for shigellosis. **Renal Impaired:** Creatinine clearance above 30 ml/min, give usual dosage, 15-30 ml/min, give one-half the usual regimen; below 15 ml/min, use not recommended

**ACUTE EXACERBATIONS OF CHRONIC BRONCHITIS IN ADULTS:** Usual adult dosage is one DS tablet, two tablets or four teaspoonfuls (20 ml) b.i.d. for 14 days

**PNEUMOCYSTIS CARINII PNEUMONITIS:** Recommended dosage is 20 mg/kg trimethoprim and 100 mg/kg sulfamethoxazole per 24 hours in equal doses every 6 hours for 14 days. See complete product information for suggested children's dosage table

**HOW SUPPLIED:** DS (double strength) Tablets (160 mg trimethoprim and 800 mg sulfamethoxazole)—bottles of 100, 250 and 500. Tel-E-Dose® packages of 100. Prescription Paks of 20 Tablets (80 mg trimethoprim and 400 mg sulfamethoxazole)—bottles of 100 and 500. Tel-E-Dose® packages of 100. Prescription Paks of 40. Pediatric Suspension (40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoon)—bottles of 100 ml and 16 oz (1 pint). Suspension (40 mg trimethoprim and 200 mg sulfamethoxazole per teaspoon)—bottles of 16 oz (1 pint)

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#### COMPARATIVE PHARMACOLOGY OF THREE ANALGESICS

	CONSTIPATION	RESPIRATORY DEPRESSION	SEDATION	EMESIS	PHYSICAL DEPENDENCE
HYDROCODONE		X			X
CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

- ◆ Vicodin offers: less nausea, less sedation, less constipation.

**...and longer lasting pain relief—  
up to 6 hours.**

- ◆ Vicodin contains hydrocodone not codeine. In one study, 10 mg. of hydrocodone alone was shown to be as effective as 60 mg. of codeine.<sup>1</sup>
- ◆ In a double-blind study, Vicodin (2 tablets), provided longer lasting pain relief than 60 mg. of codeine.<sup>2</sup>

#### **Plus...**

- ◆ Vicodin offers the convenience of CIII prescribing.
- ◆ Dosage flexibility—1 tablet every 6 hours or 2 tablets every 6 hours (up to 8 tablets in 24 hours).

## **vicodin<sup>®</sup>**

hydrocodone bitartrate 5 mg. (Warning: May be habit forming) with acetaminophen 500 mg.

**The original hydrocodone analgesic.**



# Specify "Dispense as written" for the original hydrocodone analgesic.

**INDICATIONS AND USAGE:** For the relief of moderate to moderately severe pain.

**CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone.

**WARNINGS:**

**Drug Abuse and Dependence:** VICODIN® is subject to the Federal Controlled Substances Act (Schedule III). Psychic dependence, physical dependence and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN should be prescribed and administered with the same caution appropriate to the use of other oral-narcotic-containing medications.

**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

**PRECAUTIONS:**

**Special Risk Patients:** VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

**Information for Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Use in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic Effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.

**Labor and Delivery:** Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSAGE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.

The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982.

5685

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978

2. Beaver, WT *Arch Intern Med*, 141:293-300, 1981.

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\*CARDIZEM® (diltiazem HCl) is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents

<sup>1</sup>See Warnings and Precautions.

Please see brief summary of prescribing information on the next page.

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# CARDIZEM<sup>®</sup> ANTIANGINAL PROTECTION diltiazem HCl/Marion PLUS SAFETY

Usual maintenance dosage range: 180-360 mg/day

## Brief Summary Professional Use Information

**CARDIZEM<sup>®</sup>**  
(diltiazem HCl) 30 mg, 60 mg, 90 mg, and 120 mg Tablets

## CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, and (3) patients with hypotension (less than 90 mm Hg systolic).

## WARNINGS

1 **Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.

2 **Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.

3 **Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.

4 **Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, CPK, LDH, SGOT, SGPT, and other symptoms consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

## PRECAUTIONS

**General.** CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any new drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies,

oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes, however, these changes were reversible with continued dosing.

**Drug Interaction.** Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities. In healthy volunteers, diltiazem has been shown to increase serum digoxin levels up to 20%.

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

**Pregnancy.** Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

**Pediatric Use.** Safety and effectiveness in children have not been established.

## ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater than that reported during placebo therapy. The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency at presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%).

Rx

*Cardizem<sup>®</sup>*  
*(diltiazem HCl)*

☐ 60 mg ☐ 90 mg

☐ 120 mg

*Sig: tid*

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second or third degree — see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Pelliculosis, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarthralgia pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established.

Issued 9/86

See complete Professional Use Information before prescribing

**References:** 1. Schroeder JS. *Mod Med* 1982;50(Sept): 94-116. 2. Cohn PF, Braunwald E. Chronic ischemic heart disease. In Braunwald E (ed): *Heart Disease. A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. 3. O'Rourke RA. *Am J Cardiol* 1985;56:34H-40H. 4. McCall D, Walsh RA, Fröhlich ED, et al. *Curr Probl Cardiol* 1985;10(8): 6-80. 5. Frishman WH, Charlop S, Goldberger J, et al. *Am J Cardiol* 1985;56:41H-46H. 6. Shapiro W. *Consultant* 1984;24(Dec): 150-159. 7. O'Hara MJ, Khurmi NS, Bowles MJ, et al. *Am J Cardiol* 1984;54:477-481. 8. Strauss WE, McIntyre KM, Ponis AF, et al. *Am J Cardiol* 1982;49:560-566. 9. Feldman RL, Pepine CJ, Whittle J, et al. *Am J Cardiol* 1982;49:554-559.

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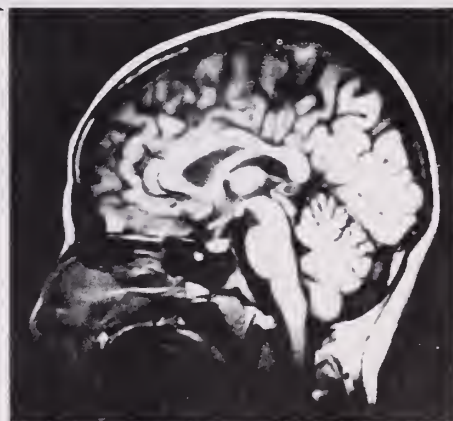
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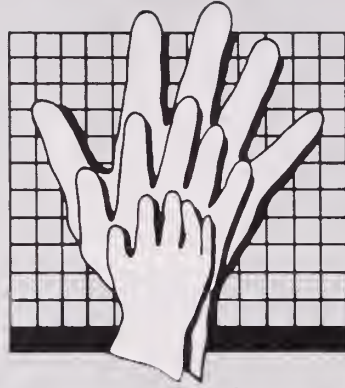
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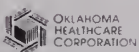
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# REYE SYNDROME

***Reye syndrome is a rare but dangerous condition that can develop from flu or chicken pox. It occurs mainly in children under 16, usually when they appear to be recovering. Watch for these signs:***

- **Persistent vomiting**
- **Fatigue**
- **Confusion and belligerence.**

**If your child displays any of these symptoms, *consult a doctor immediately.***

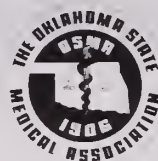
Some studies indicate that there may be an association between the use of **aspirin** for flu and chicken pox and the development of Reye syndrome. Further studies are being conducted on this possibility. In the meantime, the **U.S.**

**Surgeon General** suggests that you check with your doctor before using aspirin or any medication when your child has flu or chicken pox.

—A message from the Food and Drug Administration.

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Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

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## AUXILIARY

The December festivities are again over, and we have approached January with much resolve. For many of us it will be to count calories, to become more physically fit, or perhaps master some new challenge. Whatever it is, we will want to improve our general well being.

As health projects chairman for the state, I have encouraged all auxiliaries to improve the educational well being of their county by becoming involved in a health-related program. The AMA has asked the auxiliary to help them implement the "Adolescent Health Initiative Program" which helps young people grow into healthy adults. With this in mind there are many teaching programs and posters available through the National Project Bank and also a videotape by the AMA, which can be obtained from the state health program chairman. It is important for us to continue to see that physicians and their office staff are familiar with the Medi-File cards and their use. These cards are free and can be obtained from the OSMA office. Last, but not least, is our "AIDS Awareness Program."

The specific goals for the AIDS project are to become educated about AIDS ourselves, to implement new programs or complement existing AIDS educational programs, and to be a resource and a conduit of AIDS information for our communities.

Tulsa County, under the able leadership of Joan Maquire, has accepted this challenge and has

already hosted several educational events. In October, an AIDS Speakers' Bureau training session for auxiliary members in and around Tulsa was held at the American Red Cross, and Deborah Gesin, of the Oklahoma State Department of Health, was our educator. By the end of November, some who had attended had been called by community groups, ie, churches, to present an AIDS program. A Tulsa Town Hall was held in early November with Dr Duke Kasprisin, Dr Mark Rowland, and Deborah Gesin as expert panelists. The Tulsa County Medical Society Auxiliary had this session taped, and it is available to all the county auxiliaries for viewing in their communities.

The theme of the OSMAA this year is "Physician Partnerships Working Together in Times of Change." In Oklahoma we are fortunate to have such talented and dedicated professionals who are willing to donate their time to us so that we may become more informed, and what a wonderful opportunity we have for physicians and their spouses to enlighten their communities about AIDS. A friend of mine, a physician's wife, said: "I am not afraid of AIDS, but I do have a healthy respect for the disease." Let us all try to dispell some of the fear caused by hearsay information and instill a healthy respect for AIDS in our community.

*Pat Minielly  
State Health Projects Chairman*



## THE LAST WORD

■ Medicine Day at the Oklahoma State Capitol will be Wednesday, March 9, from 9 AM to 3 PM. Mark your calendars and plan to be there. The event, sponsored by the Oklahoma State Medical Association and OSMA Auxiliary, gives doctors, their spouses, and friends of medicine a chance to meet their legislators face to face.

■ John B. Forrest, MD, Tulsa urologist, has been named one of the Outstanding Young Men of America. Dr Forrest, a clinical instructor in surgery-urology at Tulsa Medical College, was nominated for the honor by one of his students. Selections are made on the basis of past achievements and civic involvement as well as professional accomplishment.


■ Posttraumatic stress disorder (PTSD), an assortment of psychological symptoms resulting from exposure to a life-threatening situation, is well documented in adults (eg, Vietnam veterans). Now a study in December's *Archives of General Psychiatry* indicates acute posttraumatic stress disorder also occurs in children. Robert S. Pynoos, MD, MPH, of the UCLA Neuropsychiatric Institute and Hospital, Los Angeles, and colleagues studied 159 school children after a 1984 sniper attack on their elementary school playground killed two people and injured others. Using standardized methodology to gauge PTSD symptoms in the youngsters, the authors found "strong evidence that acute PTSD symptoms occur in school-age children with a notable correlation between proximity to the violence and number of PTSD symptoms." There was no correlation between symptoms and gender, age, or ethnic group.

■ A number of researchers have observed that myopia, or nearsightedness, is more often seen among people of high intelligence, educational levels, and academic achievement, but most of these studies involved relatively small or selective groups. A study in November's *Archives of Ophthalmology* confirms that this association holds in a very large sample, and even offers a formula for expressing the

relationship between the rate of myopia, years of schooling, and intelligence level. Mordechai Rosner, MD, and Michael Belkin, MA, MD, of the Sheba Medical Center, Tel Aviv University, Tel Hashomer, Israel, studied nearly 158,000 males aged 17 to 19 years and found a strong association between the prevalence of myopia and both intelligence and years of schooling. The cause-and-effect relationship involved is unclear, but it is believed that both genetic and environmental factors play a role.

■ A letter in the *Journal of the American Medical Association (JAMA)* reports on a surprisingly substantial prevalence of human immunodeficiency virus (HIV) seropositivity in an unselected group of obstetric patients in Jacksonville, Fla, a city not known for high rates of AIDS. Andrew M. Kaunitz, MD, of the University Hospital of Jacksonville, and colleagues say they screened about 300 pregnant women who sought prenatal care at their clinic for indigent patients. Overall, two of the women (6.7 per 1,000) were seropositive. Of 39 women reporting one or more risk factors, one (25.7 per 1,000) was seropositive, as was one of the 250 women reporting no risk factors, (four per 1,000), the authors say. "Screening of pregnant women, including those without obvious risk factors for HIV infection, seems acceptable and may be appropriate in many obstetric settings. Identification of seropositive women *before* conception, however, is preferable," the letter concludes. The letter was published in the November 20 issue of *JAMA*.

■ That new voice on the telephone at OSMA headquarters belongs to receptionist Carol Dumler. She joined the staff in early December when her predecessor, daughter Beth, left the position to become a flight attendant for Eastern Airlines.

■ In this important election year, OSMA members are reminded to give their votes some extra clout by joining OMPAC, the Oklahoma Medical Political Action Committee. 

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Before prescribing, please consult complete product information, a summary of which follows:

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety.  
**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use in patients taking MAO inhibitors or within 14 days following discontinuation of MAO inhibitors. Severe hypotensive crises, severe convulsions and deaths have occurred with concomitant use, then note cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated in acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients (Arrhythmias, sinus tachycardia and prolongation of QT interval have been reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Use in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Physical and psychological dependence to chlordiazepoxide have been reported rarely. Use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage. Withdrawal symptoms following discontinuation at either component alone have been reported (drowsiness, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those for barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of delayed elimination and increasing steady state concentrations of the tricyclic drugs, concomitant use of Limbitrol with other psychotropic drugs has not been evaluated. Sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to initial treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to lowest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine salicylate has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. **Limbitrol DS (double strength) Tablets:** Initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. **Limbitrol Tablets:** Initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** **Double strength (DS) Tablets,** white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and **Tablets,** blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose<sup>®</sup> packages of 100, Prescription Paks of 50.



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**Precautions:** While a weak antiandrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlordiazepoxide, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. [Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.]

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

**Adverse Reactions:** Diarrhea, dizziness, somnolence, headache, rash, Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly un-

likely. A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

**How Supplied:** Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

**Liquid:** 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

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**Vials:** 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

**Prefilled Syringes:** 300 mg./2 ml. in single-dose pre-filled disposable syringes.

**Plastic Containers:** 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

**ADD-Vantage® Vials:** 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) Injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

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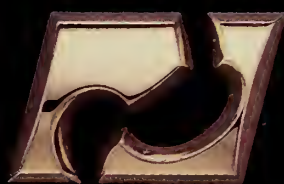
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# JOURNAL

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About the cover:

Medicine Day at the State Capitol, annual joint project of the  
Oklahoma State Medical Association and the OSMA Auxiliary,  
returns this year on Wednesday, March 9.

Art direction by Graphic Art Center, Oklahoma City

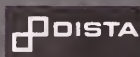
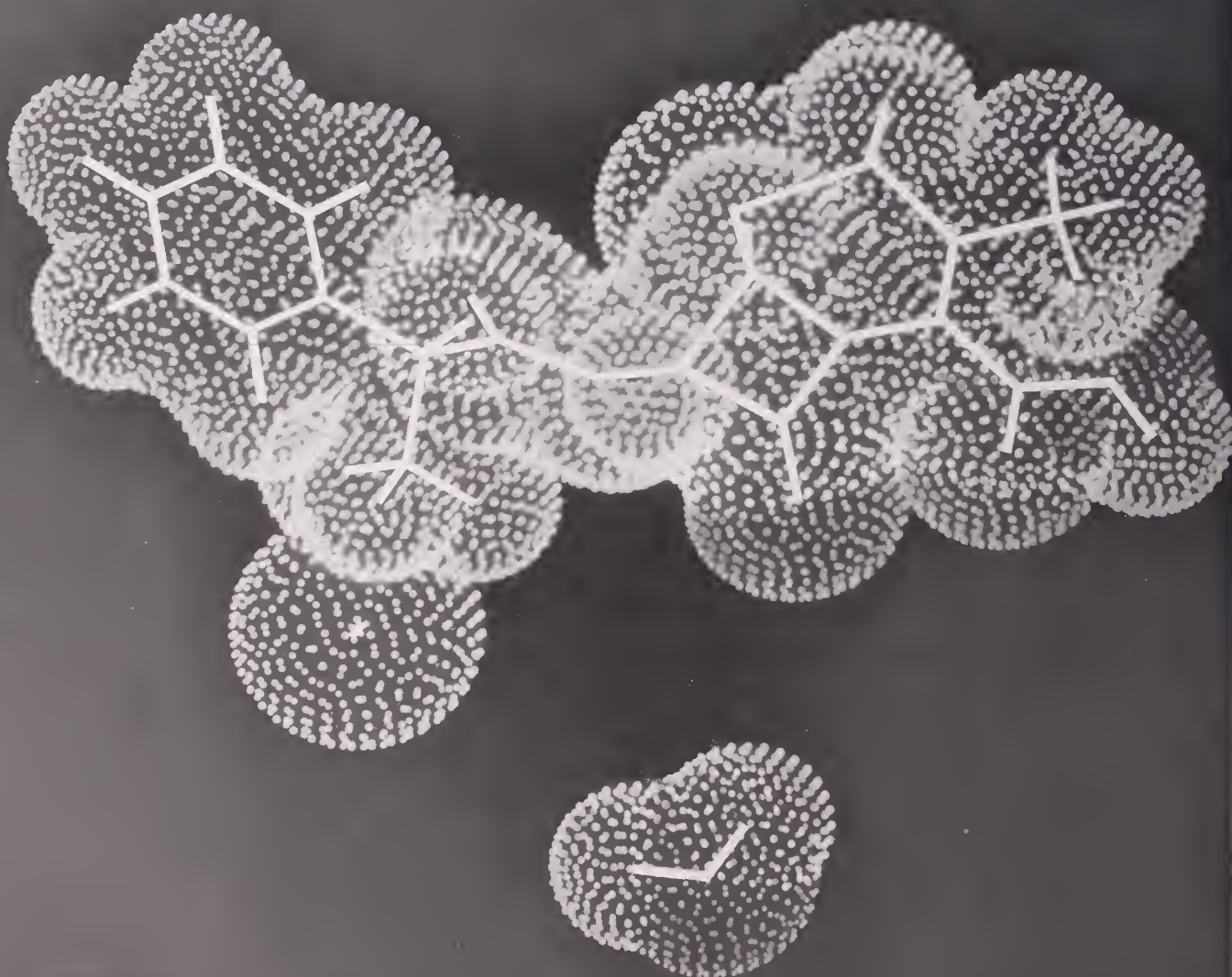


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*Bone infections* caused by susceptible strains of  
*S aureus* and/or *Proteus mirabilis*.

*Genitourinary tract infections*, including acute pros-  
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in pregnancy and lactation. Cephalexin is excreted  
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- Safety and effectiveness in children have not been  
established.

### Adverse Reactions:

- *Gastrointestinal*, including diarrhea and, rarely, nau-  
sea and vomiting. Transient hepatitis and chole-  
static jaundice have been reported rarely.
- *Hypersensitivity* in the form of rash, urticaria, angio-  
edema, and, rarely, erythema multiforme, Stevens-  
Johnson syndrome, or toxic epidermal necrolysis.
- *Anaphylaxis* has been reported.
- *Other reactions* have included genital/anal pruri-  
tus, genital moniliasis, vaginitis/vaginal discharge,  
dizziness, fatigue, headache, eosinophilia, neutro-  
penia, and thrombocytopenia; reversible interstitial  
nephritis has been reported rarely.
- Cephalosporins have been implicated in trigger-  
ing seizures, particularly in patients with renal  
impairment.
- *Abnormalities in laboratory test results* included  
slight elevations in aspartate aminotransferase  
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CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975, 2: 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980, 93, 588-96.

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**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

**PRECAUTIONS:**

**Special Risk Patients:** VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

**Information For Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic Effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.

**Labor and Delivery:** Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

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The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982.

5685

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978
2. Beaver, WT *Arch Intern Med*, 141: 293-300, 1981.

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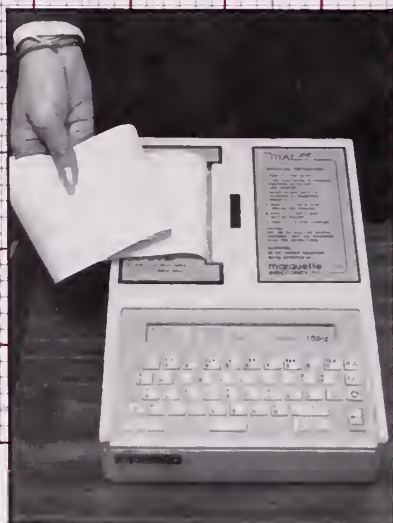


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## Certifying dilettantes

Steadily gaining momentum, the push for re-certification and re-credentialing goes on. Specialty groups, licensing organizations, academic societies, and consumer advocates are becoming more vocal and visible in their press for action.

The Federation of State Medical Boards (FSMB) has prepared and will soon make available a Special Purpose Examination (SPEX) designed to provide basic information concerning the level of clinical and technical knowledge maintained by physicians who have been out of formal training for a number of years. Also, it now seems probable that the National Board of Medical Examiners (NBME) will join the FSMB in sponsoring a transitional assessment of skills and knowledge mechanism which will certify a physician's readiness and competency to care for patients and enter the practice of medicine. If this long-sought and sorely needed mechanism materializes, it will make possible a more uniform pathway to licensure among the jurisdictions desiring its adoption.

With such moves underway, the cry for more certified participation in accredited Continuing Medical Education (CME) programs and courses becomes strident.

Generally, I suppose, most such CME programs are worthwhile and do offer effective deterrents to the steady dissipation of basic and contemporary knowledge possessed by the majority of practicing physicians. As presently structured, however, CME programs are decidedly inadequate to the task of true validation of the practitioner's competency. Satisfaction of CME credits requirements obviously does nothing to reveal the personal attributes, attitudes, emotional stability, physical health, or cultural compatibility of the physician who earns them. Neither does it attest that the practitioner who has duly earned his CME credits has the faintest knowledge of the countless laws, rules, and regulations which govern his practice. In fact, I feel sure that less than half of the physicians currently

recognized as among the most competent in their fields can, today, write a legal prescription for a Schedule II controlled dangerous substance.

Worse than all these shortcomings of the CME/written examination certification of competency plan is the complete absence of any requirement that the physician seeking re-certification has actually cared for a patient, even *one* patient, *ever*—since leaving a structured, academic, postgraduate training program.

The science and art of the practice of medicine constitute a sophisticated skill at least equal to that of piloting an aircraft or playing the violin. Yet we are well on our way toward certifying as wholly competent to practice medicine countless numbers of *non-practicing* physicians who have earned the right number of CME credits and passed one or more written examinations but who have not cared for or professionally seen a patient in ten or fifteen years.

The leadership of the FSMB, the NBME, the AMA, the specialty groups, and the licensing agencies can and must correct this dangerous drift toward the certification of dilettante physicians.

Dr Sir William Osler wrote that to study patients without books is to sail an uncharted sea, while studying books without patients is never to have gone to sea at all.

Yet here we stand, at the verge of certifying navigators who stay ashore and frequently mandate the course we are to sail, through storm and reef.

Surely we are not that foolish.

Surely the practice of medicine, both its science and its art, counts for something that is vital, essential, and indispensable in assessing a physician's level of competency.

If caring for patients is not a prerequisite for the re-certification of those who are licensed as medical doctors, the MD will, in many instances, designate the medical dilettante rather than the competent, practicing, medical doctor.

—MRJ

### Legislative Committee: Tort reform now

On January 11, 1988, something truly extraordinary happened to restore my confidence in our legislative process.

The Oklahoma legislature's Select Committee on Insurance Rates and Tort Claims issued its final report which recognizes the liability insurance crisis in our state and recommends significant reform in our tort laws.

Sometimes wonders never cease.

For the past two years the Oklahoma State Medical Association and other business and professional groups have asked the Oklahoma legislature to modify our tort laws to ensure the availability and affordability of liability insurance in our state. There have been modest successes such as immunity for reporting inappropriate physician behavior to a licensing board, immunity for participation on a physician peer review committee, and lessening the statute of limitations for minors and incompetents.

However, trial lawyers in our legislature stymied significant reform by claiming there weren't enough facts and data on insurance companies to make an educated decision. (Since when have lawyers ever been concerned about facts, but I digress.)

So what did our legislators do? They formed the Select Committee on Insurance Rates and Tort Claims, which consisted of nine members of the House and Senate and nine representatives of medicine, law, and business, to study the matter.



Oklahoma physicians owe a great deal of thanks to Oklahoma City surgeon Larry L. Long, MD, who so ably represented us on the committee. Despite Dr Long's presence, I couldn't help thinking that when legislators form a study committee, it usually is the kiss of death.

But not this time! This bipartisan committee's report, which will be distributed to the entire legislature, recommends, among other things, a limit on noneconomic damages except in cases of body disfigurement, structured payments for large awards, and presentation of collateral sources of compensation as evidence when determining an award.

The system does work. These recommendations make sense for the future of health care and also the economic development of Oklahoma.

For the trial lawyers in our legislature to disregard the select committee's report would be a travesty of our democratic system.

I urge Oklahoma physicians not to let this happen. Call or write your legislator indicating your support of the select committee's report.

Write in care of the State Capitol, Oklahoma City, OK 73105, or call the House of Representatives, 405-521-2711, or State Senate, 405-524-0126.

Let's remind our legislators that the impartial facts as determined by their own committee demand tort reform.

There are no more excuses.

A handwritten signature in dark ink, appearing to read "Larry L. Long, MD". The signature is fluid and cursive, with a large initial "L".

# The Demographics of Aging in Oklahoma: Implications for Health Care Delivery

Deborah R. McFarlane, DrPH

---

*Oklahoma's elderly population is growing; demand for physician services and caregiving assistance will increase through the mid-twenty-first century.*

---

**T**his article addresses the demographics of aging in Oklahoma. Demography is the study of the dynamics of human populations; it focuses on population size, geographic distribution, composition, and how these parameters change over time.<sup>1</sup> The first section examines current population facts in Oklahoma and compares them to statistics for the nation as a whole. The second section analyzes why the state and national populations are becoming older. Finally, the third section examines the health status of this population and its implications for health care in the future.

**Sixty-five: The Chronological Cutoff.** Sixty-five years of age or older is the parameter that is used most often to define the terms *elderly*, *aged*, or *old*. Its use became widespread after the enactment of the Social Security Act in the mid 1930s. Legisla-

tive provision for retirement came about at that time because of economic and demographic factors, namely, the reduced need for the skills and knowledge of the older worker in an increasingly industrialized society. Although dramatic changes have occurred in the economy, in the labor force, and in the health status of the elderly, 65 years of age persists as the most widely *accepted* time for retiring from work and for being considered old.

Much of the data presented here employs the 65 year cutoff. For most individuals, however, life events and health conditions associated with aging occur both before and after 65 years of age. For example, a 1978 Harris survey found that nearly two thirds of US retirees had left work before the age of 65 years.<sup>2</sup> Nevertheless, 65 remains the conventional cutoff for the aging population.

## THE AGED POPULATION IN OKLAHOMA

**Size and Distribution Among Cohorts.** Nearly 12% of Oklahoma's population is 65 years or older.<sup>2,3</sup> This proportion is similar to the 11.7% elderly for the US population as a whole<sup>4</sup> (See Table 1). These 393,000 elderly Oklahomans are distributed unevenly among the various ten-year age groups or cohorts that comprise the state's aged population.

---

An earlier version of this paper was presented at the Third Annual Chronically Ill and Aging Conference sponsored by the Department of Medicine, University of Oklahoma Health Sciences Center; Veterans Administration Medical Center; and O'Donoghue Rehabilitation Institute; Oklahoma City, Oklahoma; November 1985.

Direct correspondence to Deborah R. McFarlane, DrPH, MPA, Department of Health Administration, College of Public Health, University of Oklahoma Health Sciences Center, PO Box 26901, Oklahoma City, OK 73190.



Table 2 shows that Oklahoma has a slightly younger aged population than the US in general. The age distribution of cohorts within the older population is important. The elderly are a heterogeneous population in terms of health status, income, and life experiences; many of the differences among persons aged 65 years and older can be explained by the age distribution within this population.<sup>5</sup> For example, the average 65-year-old is generally healthier, more independent, and more socially interactive than the average 85-year-old.

**Geographic Distribution.** The geographic distribution of the populations of Oklahoma and the United States are shown in Table 3. Both the total and the aged populations of Oklahoma are more likely to live in small towns than are other Americans. Older Oklahomans are much less likely to live in the urban fringe, though this phenomenon may be related to the large areas incorporated by Oklahoma City and Tulsa, the largest metropolitan areas in the state. Within the state, the elderly population is more likely to live in small towns than are other age groups and is only slightly less likely to live in rural areas.<sup>2</sup>

**Composition. Racial.** The racial composition of the total and elderly populations for Oklahoma and the US as a whole is shown in Table 4. Oklahoma has similar proportions of whites in both populations

**In Oklahoma, one of every five elderly persons lives below the poverty level. This compares to one of every seven ... in the US as a whole.**

as does the rest of the country, but the composition of the minority population is different. More specifically, there are relatively fewer blacks and more American Indians in Oklahoma. Both elderly populations have proportionately more whites than do the total populations. This phenomenon is due primarily to the longer life expectancies of whites, the differential fertility and mortality rates of the past 50 years, and past immigration policies.

**Sex.** The sex composition of Oklahoma's aged population is shown in Table 5 by the use of sex ratios. As usually expressed, the sex ratio is the

**Table 1. Number and Percent of Population Aged 65 and Over in the United States and Oklahoma: 1980, 1983**

	Oklahoma	US
<b>1980</b>		
Number	376,000	25,544,000
Percent	12.4	11.3
<b>1983</b>		
Number	393,000	27,383,000
Percent	11.9	11.7

Source: Statistical Abstract of the United States 1985, pp 28-29.

**Table 2. Percent Distribution of the Population Aged 65 and Over for the United States and Oklahoma, 1980**

	Oklahoma	US
65 +	100%	100%
65 - 69	35.5	32.6
70 - 74	26.7	27.1
75 - 79	17.3	19.5
80 - 84	13.0	11.6
85 +	7.9	9.0

Source: 1980 Census of Population, Vol 1 Characteristics of the Population.

number of males per 100 females in a population. If there are equal numbers of males and females, the sex ratio is 100. In most modern societies, the general sex ratio is less than 100, since women tend to outlive men. Sex ratios change over the life cycle: the older the cohort, the smaller the number of males relative to the number of females.<sup>6</sup> In Oklahoma, there were 76 men aged 65 through 74 years for every 100 women in that age group in 1980. After age 84, there were only 43 men per 100 women. The sex ratios for Oklahoma were slightly higher for the 65-74 and 75-84 cohorts than for the nation as a whole.

**Marital Status and Living Arrangements.** Relatively small numbers of elderly live in intergenerational households with children or with other relatives, although this percentage increases with age, particularly for older women. Both the marital status and the living arrangements of older persons vary tremendously by sex. Most men spend their elderly years married and in family settings. However, elderly women are more likely to be widowed than married and a substantial proportion live alone. The male/female disparity is more marked at older ages; in 1984, 67% of women 75 years old and older were widowed while 67% of the men in this age group were still married. In 1983, 65% of men 75 years and older lived with their wives, while only

**Table 3. 1980 Percent Distribution of Population Among Urban and Rural Areas: US and Oklahoma**

	Oklahoma	US
<b>Population Population</b>		
Urban		
Central cities	29.1	29.5
Urban fringe	12.8	31.8
Places of 10,000 or more	17.4	5.9
Places of 2,500-10,000	11.8	6.4
Rural		
Places of 1,000-2,500	5.3	3.1
Other rural	27.4	23.1
<b>Population 65 and Older</b>		
Urban		
Central cities	25.4	31.4
Urban fringe	6.9	28.1
Places of 10,000 or more	16.0	6.8
Places of 2,500-10,000	17.7	8.2
Rural		
Places of 1,000-2,500	8.1	4.2
Other rural	25.9	21.2

Source: 1980 Census of Population, Vol 1, *Characteristics of the Population*.  
Note: Percentages may not add up to 100 because of rounding.

**Table 4. Percentage by Race of the Total and Elderly (65 years of age and older) Populations of the United States and Oklahoma**

	Oklahoma	US
<b>Total Population</b>	<b>100%</b>	<b>100%</b>
White	85.0	83.1
Black	6.7	11.7
Spanish origin*	1.3	6.4
Other races	6.4	2.6
<b>Population 65 and Over</b>	<b>100%</b>	<b>100%</b>
White	90.4	89.8
Black	5.2	8.2
Spanish origin*	0.0	2.8
Other races	4.4	2.7

\*Spanish origin may overlap racial categories  
Source: 1980 Census of Population, Vol 1 *Characteristics of the Population*.

21% of the 75-years-plus women lived with husbands. These differences are caused by the combined effects of the higher age-specific death rates for adult men and the tendency for men to marry younger women. Elderly, widowed men have remarriage rates about seven times higher than those of elderly women.<sup>7</sup>

**Economic Status.** The economic position of elderly persons is usually lower and less secure than that of younger people. Incomes among the elderly are associated with many factors over which they have little control: sex, race, the health and survival of their spouses, and their own health and ability to

continue working.<sup>7</sup> In Oklahoma, one of every five elderly persons lives below the poverty level.<sup>8</sup> (The 1984 poverty level for those 65 years old and older was \$4,979 for one person and \$6,282 for two.) This statistic compares to one of every seven elderly living in poverty in the US as a whole.

Within the elderly population, the differences in income levels between men and women and between blacks and whites is striking. The income levels for women of all age groups are much less than those for men of the same race. White men tend to have the highest median income and black women the

Table 5. Sex Composition of the US and Oklahoma Aged Populations, 1980

	Oklahoma		US	
	Male	Female	Male	Female
<b>65 - 74</b>				
Number	97,100	127,600	6,775,200	8,822,400
Sex ratio	.76		.77	
<b>75 - 84</b>				
Number	44,300	73,200	2,866,000	4,860,900
Sex ratio	.61		.59	
<b>85 +</b>				
Number	10,300	23,700	681,400	1,558,300
Sex ratio	.43		.44	

Source: US Bureau of the Census, *Current Population Reports*, Series P-25, No 937, *Provisional Projections of the Population of States by Age and Sex: 1980 to 2000*, US Government Printing Office, Washington, DC, 1983.

Table 6. Growth of the Older Population in Oklahoma, Actual and Projected (thousands): 1980 - 2000

Year	Total Population All Ages	55-64 Years		67-74 Years		75-84 Years		85 Years & Over		65 Years & Over	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
<b>1980</b>											
Male	1,476.7	132.0	8.9	97.1	6.6	44.3	3.0	10.3	0.7	151.7	10.3
Female	1,548.5	148.9	9.6	127.6	8.2	73.2	4.37	23.7	1.35	224.5	14.5
<b>1990</b>											
Male	1,716.7	137.3	7.9	108.5	6.3	57.5	3.3	14.8	.9	180.8	10.5
Female	1,786.7	166.3	9.3	134.5	7.5	95.7	5.4	36.2	2.0	266.2	14.9
<b>2000</b>											
Male	1,939.7	166.3	8.6	112.2	5.8	65.5	3.4	20.6	1.1	198.3	10.2
Female	2,004.8	177.2	8.8	137.2	6.8	102.9	5.1	52.5	2.6	292.6	14.6

Source: US Bureau of the Census, *Current Population Reports*, Series P-25, No 937, *Provisional Projections of the Population of States, by Age and Sex: 1980 to 2000*, US Government Printing Office, Washington, DC, 1983.

lowest. In 1981, elderly white men had a median income of about \$8,600; white women, \$4,900; black men \$4,900; and black women \$3,500. Eighty percent of elderly black women had incomes less than \$5,000, compared with about half of white women and black men and one-fifth of white men.<sup>9</sup>

## THE DYNAMICS OF THE GROWING ELDERLY POPULATION

**1900-1980.** The number of elderly in the United States as a whole has increased dramatically since 1900. The elderly continue to represent a larger share of the total population each succeeding decade. In 1900, only 4.1% of the population was 65 years old and older. By 1950, that percentage had doubled (8.2%), and it had nearly tripled (11.7%) by 1980. In

absolute numbers, there are more than eight times as many elderly Americans now as there were in 1900: from approximately 3 million (3,099,000) in 1900 to more than 25 million (25,544,000) in 1980. The major causes for this dramatic change are the high fertility rates in the early part of the century, decreasing mortality rates throughout the century, and high immigration rates prior to World War I.<sup>6</sup>

Fertility has been the most important cause of the growing number and increasing proportion of older persons. Past fertility determines the numbers of persons aged 65 years and over, while current fertility affects their proportion of the total population. During the first part of the twentieth century, fertility was high; that is, the American population was producing large cohorts. Fertility has decreased dramatically in the latter third of the century,



**Table 7. Top 16 Chronic Conditions Affecting Persons 65 Years of Age and Over: Rate per 1,000 Persons by Age (US 1981) and Numbers of Persons Affected in Oklahoma (1983 estimated)**

Chronic Condition	Rate per 1,000 Persons 65 +	Numbers of Persons Affected Oklahoma
Arthritis	464.7	182,627
Hypertensive disease	378.6	148,790
Hearing impairments	283.8	111,533
Heart conditions	277.0	108,861
Chronic sinusitis	183.6	72,155
Visual impairments	136.6	53,684
Orthopedic impairments	128.2	50,383
Arteriosclerosis	97.0	38,121
Diabetes	83.4	32,776
Varicose veins	83.2	32,698
Hemorrhoids	65.9	25,899
Frequent constipation	59.2	23,266
Diseases of urinary system	56.1	22,047
Hay fever	51.9	20,397
Corns & calluses	51.9	20,397
Hernia of abdominal cavity	49.1	19,296

Adapted from Soldo and Manton

ensuring that the proportion of elderly will remain high.

Mortality has also changed dramatically during this century, leading to major changes in life expectancy. In 1900, life expectancy at birth in the US was 47 years; in 1983, it was nearly 75 years. For Oklahomans, too, life expectancy was 74 years in 1983.

The decrease in infant mortality was the most significant factor in increasing life expectancy in the United States in the twentieth century. The nearly complete elimination of infectious diseases as a cause of death in the United States, along with major improvements in postnatal infant care, primarily benefited the youngest age groups. As recently as 1935, the United States had an infant mortality rate (deaths under one year of age per 1000 live births) of 55.7. By 1970, the infant mortality rate had dropped to 19.8; further reductions brought this figure down to 10.8 in 1984. The result of these changes is that larger cohorts are now aging, and they will continue to contribute more elderly to the total population throughout this century.

Immigration during the late nineteenth and early twentieth centuries is the third major cause of the increasing proportion of older persons. Initially, migrants who are typically young and disproportion-

ately male, usually reduce the proportion of older persons. From 1881 to 1930, the US received nearly 27.6 million immigrants, most of whom were 15 through 39 years of age. Immigration has continued, but not at the same rate. The average number of alien immigrants declined from 879,000 from 1900 through 1910 to 332,000 from 1961 through 1970. While the inflow of young immigrants has declined, the large numbers of earlier immigrants are aging, thus contributing to the higher proportions of elderly.

The older population itself is aging. A declining proportion of the population aged 65 years and older is in the age group 65 through 69 years, while the proportion of aged 75 years and older is increasing. Of the total older population, those 75 years and older have increased from 29% in 1900 to 38% in 1980. More than half of the population aged 75 years and older is now over 80.

**Future Growth.** Table 6 shows the same trends in Oklahoma. The elderly population will grow in numbers, and it will become older. Moreover, the number of males relative to the number of females will decrease with each decade. For the US as a whole, the older population is expected to more than double from 25.5 million in 1980 to 51 million in 2020. At the present time, about one of every nine Americans is 65 years of age or older. By 2010, one in every seven Americans is expected to be 65 years of age and over. Indeed, one fourth of the total US population is projected to be a least 55 years of age in 2010. By 2030, it is likely that one of every five Americans will be 65 years old or older, representing an 87% increase in a 20-year span. Overall, those 85 years of age and over are projected to be the fastest growing part of the older population. In less than 30 years, the number of white men, white women, and black men 85 years old and older is expected to increase about 1.5 times, while the number of black women in that group is expected to almost triple.<sup>10</sup>

## HEALTH STATUS AND HEALTH UTILIZATION

What is the health status of the growing elderly population? With infectious diseases and diseases of childhood now well controlled, mortality is primarily experienced by the aged. Usually, mortality is preceded by episodes of morbidity or years of chronic conditions. These facts, however, do not reflect that much of the elderly population experiences good health.

**Self-Assessment.** Sixty-five percent of elderly persons who are not institutionalized report their

Table 8. Percent of the 65 and Older Population with ADL Limitations<sup>1</sup> and Estimates of Numbers of Oklahomans (Thousands)

Age/Sex	ADL Score						Total
	Mildly Disabled <sup>2</sup>		Disabled <sup>3</sup>		Severely Disabled <sup>4</sup>		
	1-2	#Oklahomans	3-4	#Oklahomans	5-6	#Oklahomans	
<b>65 to 74</b>							
Male	3.4	3,301	1.7	1,651	2.4	2,330	7,282
Female	4.7	5,997	1.9	2,424	1.9	2,424	10,845
<b>75 to 84</b>							
Male	6.5	2,880	2.35	1,041	4.6	2,038	5,959
Female	10.3	7,540	4.3	3,148	4.4	3,221	13,909
<b>85 +</b>							
Male	15.7	1,617	7.7	793	7.5	773	3,183
Female	18.2	4,432	7.9	1,872	11.8	2,797	9,101
<b>All 65 +</b>							
Male	5.1	7,737	2.3	3,489	3.3	5,006	1,232
Female	7.7	17,287	3.2	7,184	3.6	8,082	32,553

1. Preliminary data from the 1982 National Long-Term Care Survey in America in Transition: An Aging Society, p 67.

2. Limited, but not in a major activity such as eating, dressing, cooking, or toileting.

3. Limited in amount or kind of major activity.

4. Unable to carry on major activities.

own health as excellent, very good, or good compared with others of their own age. Only 35% report that their health is fair or poor. Individual self-assess-

## The rate of nursing home use by the elderly has almost doubled since the introduction of Medicare and Medicaid in 1966.

ments of health status contribute important information to health care providers because they are highly associated with the utilization of health care services. For example, older persons who reported excellent health spent an average of 3.3 days in bed each year and made 2.5 physician visits per year, while the corresponding figures for persons self-assessed to be in poor health were 64.2 bed days and 15.3 physician visits.<sup>7</sup>

**Chronic Conditions.** More than 80% of persons aged 65 years and over have at least one chronic condition, and multiple conditions occur frequently

among the elderly. In 1982, the leading chronic conditions causing limitations of activity for the elderly were arthritis, hypertensive disease, hearing impairments, and heart conditions. The estimated numbers of elderly persons with chronic conditions is shown in Table 7.

The types of conditions experienced by older people vary by sex and race. Older men are more likely than women to experience acute illnesses that are life-threatening. Elderly women, on the other hand, are more likely to have chronic illnesses that cause physical limitations. For example, osteoporosis is much more common among older women than men, while coronary heart disease is more prevalent in older men. The health status of elderly blacks is generally poorer than that of elderly whites. For example, hypertension is more common among blacks 65 to 74 years old (45%) than whites (33%).<sup>7</sup>

**Disability.** One of five elderly persons has some degree of disability, but only a small proportion are severely disabled. The numbers of elderly, disabled Oklahomans are shown in Table 8. A widely used measure of disability among older persons is the number of people with an activity of daily living limitation known as an ADL. According to the ADL scale, disabled individuals are mildly disabled (an ADL of one to two), disabled (an ADL of 3 to 4), or severely disabled (an ADL of 5 to 6). Although more



**Table 9. Estimated Utilization of Health Care by Persons 16 and Older in Oklahoma: 1980**

Sex and Age	Numbers		
	Hospital Days of Care	Physician Visits	Nursing Home Residents
<b>Male</b>			
65-74	327,170	537,791	1,233
75-84	242,287	300,815	2,097
85 +	43,661	65,452	1,440
Total 65 +	640,472	898,428	4,655
<b>Female</b>			
65-74	380,052	1,064,126	2,410
75-84	366,509	477,420	5,898
85 +	156,348	134,524	5,959
Total 65 +	898,007	1,518,494	13,403

Adapted from *America in Transition*

than half of the oldest old, those 85 years old and older, are not disabled, the chance of becoming at least mildly disabled increases for the oldest age groups. In fact, both men and women 85 years old and older are four times more likely to be disabled than those 65 through 74 years of age. Nearly half (46%) of persons 85 years old and older are mildly to severely disabled, compared to about 13% of persons aged 65 to 74 years, and 25% of persons aged 75 to 84 years. Women are more likely to have activity limitations when they live beyond age 85 years. For instance, about 49% of women aged 85 years and older are limited to some degree, compared to about 41% of men. About 12% of women in the oldest age category are severely disabled compared to less than 8% of men.<sup>11</sup>

In summary, most persons 65 years of age and over have a chronic condition, but most of them are not disabled. The likelihood of becoming disabled increases with age. Chronic illnesses and disabilities are related, of course. For example, 56% of males aged 65 through 74 years who have hypertensive disease have an ADL score of at least 1. These facts have important implications for the types of health services needed by this population.

**Health Services Utilization.** Largely due to the much greater prevalence of chronic conditions, older persons use medical personnel and facilities more frequently than do younger people. On the average, persons 65 years old and older visit a physician six times for every five visits by the general population. Elderly people are hospitalized about twice as often as the younger population, and they use twice as

many prescription drugs.<sup>7</sup> Not surprising is the fact that health care utilization is greatest in the last year of life and among the oldest old.<sup>11</sup>

**Caregiving Assistance.** Not only do the elderly utilize more medical and hospital services, but those with major disabilities require caregiving assistance. Much of this assistance is provided by friends, spouses, and other relatives. Indeed, relatives provide 84% of all care to men and 79% to women. More wives than husbands provide care to disabled spouses, which reflects that women outlive men by an average of seven years and that women usually marry older men. More than a third of all elderly disabled men living in the community are cared for by a wife, while only one in ten elderly, disabled women is cared for by a husband.

With increasing age, the support given by spouses decreases as other family members and "formal" caregivers compensate for the loss. Children of aging parents provide care to about a quarter of elderly men in this category and to slightly over a third of elderly women. Other relatives also provide substantial care to elderly disabled family members, accounting for 23% of all community care to men and 35% to women.<sup>7</sup>

Only about 5% of the elderly population are in nursing homes at any given time, but 20% spend time in a nursing home during a given year.<sup>12</sup> Not surprisingly, the likelihood of being in a nursing home increases with age. Nearly 75% of nursing home residents are without a spouse as compared to just over 40% of the noninstitutionalized elderly. It is worth noting that the rate of nursing home use by the elderly has almost doubled since the introduction of Medicare and Medicaid in 1966.

## UTILIZATION OF HEALTH SERVICES IN OKLAHOMA

**Current Utilization.** The estimated utilization of physician, hospital, and nursing home care is shown in Table 9. Elderly women use more of each of these services, reflecting their longer life expectancies, greater propensity to use health services, and the fact that most of them are widowed at some point in later life. We would expect that the actual utilization of nursing homes is even greater than those estimates because Oklahoma is eighth in the country in terms of the number of nursing home beds (81.9) per 1,000 residents, and the use of nursing homes is apparently more related to supply than demand.<sup>12</sup>



**Future Demand.** Both the number and the proportion of elderly will continue to increase in Oklahoma. Table 6 shows the projected increase through the year 2000, but the aging of Oklahoma's population is projected to occur at least through 2050. Along with an older population will come an increase in the conditions associated with aging. The number of persons aged 65 through 74 years with a limitation in activity will more than double by 2030, when the entire baby boom generation will have passed the age 65 cutoff. Between 1980 and 2050, the number of persons 75 years old and older with a chronic health condition is expected to triple.

These demographic facts point to an increasing demand for health care. According to projections based on 1980 physician visit rates and US Census Bureau projections, the number of physician visits will increase by 18% by the year 2000, by 30% in 2020, and by more than 36% in 2050. The need for caregiving assistance will also increase. A greater proportion of elderly means that an increasing burden will be placed upon families and friends. Given the current emphasis on cost containment, it is likely that institutionalization will become increasingly deemphasized.

Unless current demographic trends change dramatically, Oklahoma's elderly population will continue to present special challenges to the health care delivery system. Aged Oklahomans are more likely to be rural, and they are slightly older than the elderly in the rest of the country. As a group,

they are also poorer than US elderly in general. These demographic facts present many questions about how health care will be delivered, and how it will be financed. One certainty, however, remains: Oklahoma's population is aging, and it will continue to do so, at least into the foreseeable future. □

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## CALL FOR RESOLUTIONS

All resolutions to be presented to the Oklahoma State Medical Association House of Delegates Annual Meeting must be received in the executive offices no later than thirty (30) days prior to the meeting. This year's meeting will be held May 5-7, 1988, at Shangri-La Resort, Afton, Oklahoma.

County medical societies or individuals wishing to submit resolutions should mail them to OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118. Should you need assistance in drafting such resolutions, please contact the executive offices.

SUBMIT YOUR RESOLUTIONS ON OR BEFORE APRIL 6, 1988

# Profile of Oklahoma Allopathic Physicians

June E. Holmes, EdD; Deborah A. Miller, MS

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*A physician's prior educational contacts with a state strongly influence the decision to locate and practice medicine in that state.*

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Numerous studies have investigated various factors affecting the physician's choice of a practice location. McFarland<sup>1</sup> identified five categories of influence affecting a physician's choice of a practice location: prior exposure, environmental factors, medical environment, economic factors, and demand determinants. Leonardson<sup>2</sup> reported that the size of the community where the physician grew up and the size of the high school class of the physician and spouse were found to be related significantly to the community size of the physician's practice location. Yett and Sloan<sup>3</sup> indicated that the greater the number of previous contacts physicians had with a particular state, the more likely they would be to establish their first practice in that state. Influence of the spouse, group partnership, training nearby, and climate/geography were the factors ranked most frequently in a study of 207 medical school graduates by Holmes and Miller.<sup>4</sup>

In a study examining state retention of medical school graduates, Burfield, Hough, and Marder<sup>5</sup> suggested that those graduates who choose primary care specialties over nonprimary care specialties remain in state. Similar findings were noted by

Coombs and colleagues,<sup>6</sup> in that the places where students wish to practice are similar to where they were reared.

The focus of this study has been to explore the hypothesis that the more prior contacts a physician has with a state, the more strongly he or she is influenced to locate and to practice medicine in that state. Four types of previous state contacts were investigated: high school, undergraduate education, medical school, and residency/internship.

## METHODOLOGY

Basic data on all licensed allopathic physicians in the state of Oklahoma were collected from the Oklahoma State Board of Medical Examiners. The information on 7,307 licensed allopathic physicians was obtained in May 1986. Five hundred thirty-one physicians engaged in residency training were excluded from the study since licensing for some and future practice sites were undetermined.

The educational events were analyzed for 6,776 licensed physicians for the following variables: practicing in/out of Oklahoma, identification of practice sites for physicians licensed but practicing out of state, relationship between the number of events and community size, and the impact of events on physician retention.

## FINDINGS

The distribution of events for all 6,776 Oklahoma allopathic licensed practicing physicians as of April

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TABLE 1

Distribution of Events for 6,776 Oklahoma  
Allopathic Licensed Physicians

<u>EVENTS</u>	<u>N</u>	<u>%</u>
4 Events	1,640	24%
3 Events	1,107	16%
2 Events	425	6%
1 Event	957	14%
<u>0 Events</u>	<u>2,647</u>	<u>39%</u>
<b>TOTAL</b>	<b>6,776</b>	

1986 is presented in Table 1. It shows that 4,129 (61%) of the physicians have one or more events, with the largest number, 1,640 (24%), having all four events. As noted in Table 1, 2,647 (39%) have no events and represent a large number of licensed physicians.

**Practice In and Out of State.** The profile of the physicians practicing in and out of Oklahoma is presented in Table 2. Of the 4,165 physicians practicing in Oklahoma, 2,719 (65%) had at least one

**Sixty-one percent of the practicing Oklahoma physicians had received either their medical school or residency/internship training in the state.**

TABLE 2

Distribution by Educational Events for  
6,776 Oklahoma Licensed Allopathic Physicians  
By In State And Out of State Locations

<u>EVENTS</u>	Practicing In Oklahoma		Practicing Out of State	
	<u>N</u>	<u>%</u>	<u>N</u>	<u>%</u>
<b>4 Events</b>				
H.S.-PreMed-MedSchool-Resident	1,247	76%	393	24%
<b>3 Events</b>				
H.S.-PreMed-MedSchool	382	53%	339	47%
H.S.-PreMed-Resident	68	75%	23	25%
H.S.-MedSchool-Resident	88	72%	34	28%
PreMed-MedSchool-Resident	114	66%	59	34%
<b>2 Events</b>				
H.S.-PreMed	99	73%	36	27%
H.S.-MedSchool	30	44%	38	56%
H.S.-Resident	31	76%	10	24%
PreMed-MedSchool	32	36%	56	64%
PreMed-Resident	12	57%	9	43%
MedSchool-Resident	48	67%	24	33%
<b>1 Event</b>				
H.S.	62	75%	21	25%
PreMed	36	72%	14	28%
MedSchool	10	21%	37	79%
Resident	460	59%	317	41%
<b>0 Events</b>	1,446	55%	1,201	45%

educational event in the state. The largest group, 1,247 (46%), had all four educational events in Oklahoma, while 568 (21%) had only one event in the state. Of the group that had only one event, the residency/internship event was held by 460 (81%) of the group.

When the events were further analyzed, it was revealed that a total of 2,068 (50%) of the 4,165 practicing physicians had at least one residency/intern event; 1,951 (47%) had received medical school training; and 1,497 (36%) had both medical school and residency/intern events in the state. A total of 2,522 (61%) of the practicing Oklahoma physicians had received either their medical school or residency/internship training in the state.

Of the 1,410 out-of-state practicing physicians with at least one or more events, 393 (28%) had four events, 455 (17%) had three events, 173 (7%) had two events, and 389 (28%) had one event in the state.

The state locations of those physicians with Oklahoma licenses practicing out of state were tabulated. The five states with the majority of these physicians are: Texas, California, Missouri, Arkansas, and Kansas. With the exception of California, a possible explanation for the finding is that those physicians who maintain licensure in Oklahoma are located near state borders and/or utilize health care facilities in the state.

**Practice Locations.** Table 3 illustrates the



TABLE 3  
Percent of Licensed Oklahoma Physicians with  
4 Events and 0 Events in Oklahoma Communities, 1986

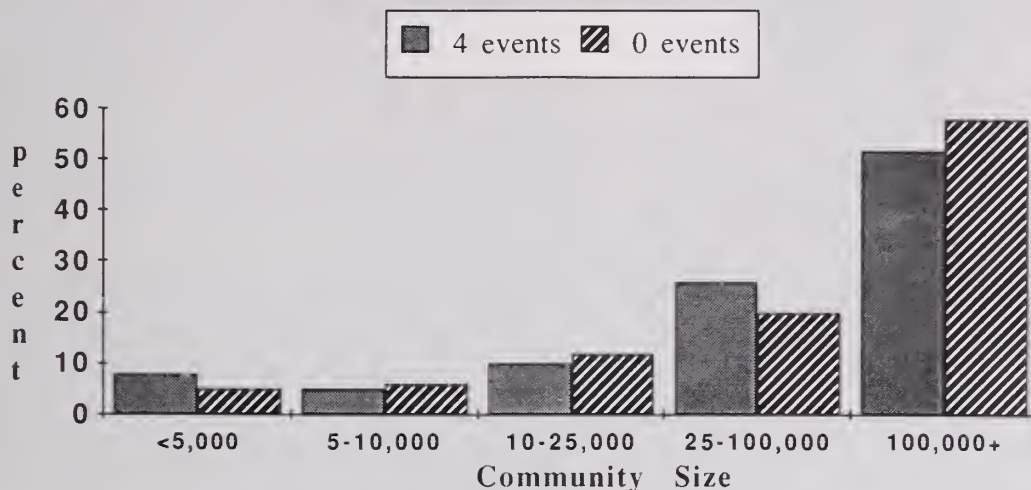


TABLE 4  
Probability of Retention by Event Categories

EVENT	CATEGORY*	N	p
Residency	(HPMR,HPR,HMR,PMR,HR,MR,PR,R)	2,938	0.70
Medical School	(HPMR,HPM,HMR,PMR,HM,PM,MR,M)	2,932	0.67
Medical School and Residency	(HPMR,HMR,PMR,MR)	2,008	0.75
Residency Only	(R)	777	0.59
Non-residency Only	(P,M,H)	180	0.60
All 4 Events	(HPMR)	1,640	0.76

\*H=High School P=PreMed M=Med School R=Residency

practice location and community size for the two groups of physicians with four and zero events. Eighty-three (7%) of the four-event group and 76 (5%) of the zero-event group practice in Oklahoma communities with populations under 5,000. Six hundred fifty (52%) of the four-event group and 843 (58%) of the zero-event group practice in Oklahoma City or Tulsa.

**Events Related to Retention.** The probability

of physicians practicing in Oklahoma based on any single event or combination of events is presented in Table 4. Physicians with all four events (1,640) and those with medical school and residency/internship training (2,008) in Oklahoma had a 76% and 75%, respectively, probability of remaining in the state.

An analysis by chi square was the statistical procedure used to determine if there were a relationship between the four- and zero-event physicians

practicing in and out of state. Results indicate a significant difference (198.70) at the .001 level. The more events a physician has in a state, the more he or she is influenced to remain in that state.


## SUMMARY

The findings of this study support the hypothesis that prior educational contacts in the state of Oklahoma do relate to physician retention. Seventy-six percent of the physicians with four events were practicing in Oklahoma, whereas 59% of those with one event were practicing in the state. Oklahoma also attracts physicians with zero events, as illustrated by the fact that 1,446 zero-event physicians were among the 4,165 physicians licensed and practicing in the state.

The number of Oklahoma events experienced by a physician was not a factor in the size of the community selected as a practice site. The group of physicians coming into the state with no Oklahoma educational events had no greater tendency to locate in different sized communities than the physicians with all four educational events in the state.

There is an indication that physicians having had all four educational events in Oklahoma have a high

probability of remaining in the state. The same finding is true if the physician has completed medical school and a residency/internship in the state.

Although the present study did not match the educational training site of the physicians with their current practice sites, there is evidence that the residency/intern training programs are powerful forces in attracting physicians to practice medicine in the state. 

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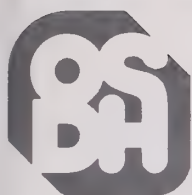
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*June E. Holmes, EdD, is coordinator for counseling and academic services at University of Oklahoma Tulsa Medical College (OUTMC). She earned her doctorate of education degree at Boston University School of Education.*

*Deborah A. Miller, MS, a 1976 graduate of Oklahoma State University, is physician placement officer at OUTMC.*

## Coming in March . . .

Among the manuscripts being considered for publication in March are a discussion of invasive pulmonary aspergillosis and a report on the assessment of candidates for heart transplantation. Also tentatively scheduled is the next Leaders in Medicine article, in production at this time.



## Prehospital defibrillation

Although the concept of prehospital defibrillation is not new to Oklahoma's paramedics, the concept has become a reality for nonparamedic/advanced-cardiac-life-support-trained personnel. The program is referred to as EMT-D, or Emergency Medical Technician-Defibrillator.

Over the years, the standard monitor/defibrillator has evolved from a massive, complex, stationary machine into a very lightweight and portable unit. The models vary with the need, and some can be taken home for use by lay persons for individuals "at risk" for heart attack.

The Oklahoma EMT-D program began in August 1985 with an initial demonstration project in which 63 Basic Emergency Medical Technicians were trained in the use of the automatic advisory defibrillator (AAD). The AAD has a computer system that determines whether to deliver a shock. The AAD

system will make an analysis on a segment of heart activity via a two-lead electrode, which also serves as the defibrillation point, should ventricular fibrillation (VF) be detected.

The program has both the basic program using Basic EMTs and the AAD, and Oklahoma's Advanced EMT. The program allows the EMT-Advanced to employ either the AAD or the standard monitor/defibrillator with a special two-channel ECG/voice recorder attached. Both programs allow for a maximum of six prehospital defibrillations at two different energy settings.

The key behind any local emergency medical services (EMS) program, especially in early defibrillation, is strong local medical control. Any EMS provider desiring to establish an EMT-D program must have a licensed physician who is willing to oversee and maintain the EMT-D, once trained.

Nationally and internationally, the early defibrillation program is saving lives. Studies from King County, Wash., and from the rural Iowa program indicate an increased number of viable survivors of out-of-hospital cardiac arrest when coupled with the EMT-D Program.

For additional information on the Oklahoma EMT-D program, contact the EMS Division at 405/271-4062.



DISEASE	November 1987	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	8	7	10
CAMPYLOBACTER INFECTIONS	16	231	245	—
ENCEPHALITIS, INFECTIOUS	2	24	21	28
GIARDIA INFECTIONS	23	187	223	—
GONORRHEA (Use ODH Form 228)	620	8942	11600	12475
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	25	169	210	—
HEPATITIS A	43	267	317	514
HEPATITIS B	17	218	191	233
HEPATITIS, NON-A NON-B	5	42	58	—
HEPATITIS UNSPECIFIED	5	33	46	134
MEASLES (RUBEOLA)	0	4	39	16
MENINGITIS, ASEPTIC	11	149	126	182
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	0	30	62	58
MENINGOCOCCAL INFECTIONS	2	23	28	28
PERTUSSIS	13	160	126	175
RABIES (Animal)	1	34	57	107
ROCKY MOUNTAIN SPOTTED FEVER	1	83	102	123
RUBELLA	0	5	0	1
SALMONELLA INFECTIONS	23	420	445	440
SHIGELLA INFECTIONS	14	145	201	262
SYPHILIS (Use ODH Form 228)	14	165	151	175
TETANUS	0	1	1	1
TUBERCULOSIS	22	216	235	233
TULAREMIA	2	25	12	22
TYPHOID FEVER	0	5	2	3

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	104
BRUCELLA LEGIONNAIRES DISEASE	5
LEGIONNAIRES DISEASE	24
MALARIA	4
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	19



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## AIDS dominates year full of medical advances

Intensifying debate over the legal and ethical aspects of AIDS, coupled with the slow but steady effort to develop effective treatments for the disease, dominated medical news in 1987.

Other medical developments during the year included government approval of two important new heart drugs and a promising — although still experimental — treatment for Parkinson's disease.

• **Long-awaited AIDS vaccine trials finally** began in 1987, with two potential vaccines being tested by year's end. In addition, zidovudine (formerly AZT), the only government-approved AIDS drug, was made widely available to patients on a prescription basis, and studies of its effectiveness were expanded to include asymptomatic patients infected with human immunodeficiency virus (HIV).

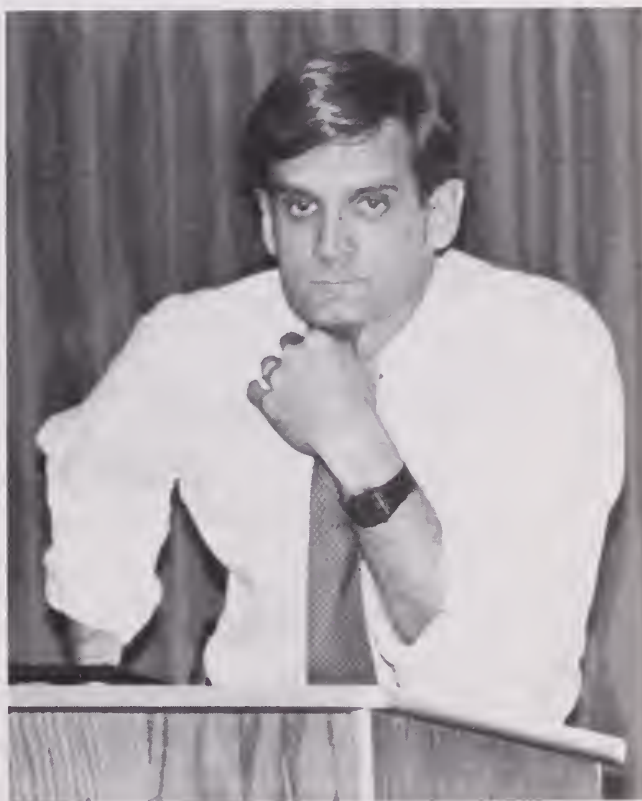
"We have learned over the past year in dealing with AIDS that progress never comes as quickly as we might like," said James H. Sammons, MD, AMA executive vice president. "We can be pleased that vaccine trials are underway, that treatment-development efforts continue, that basic research moves ahead, and that education and prevention efforts are being widely implemented.

"It is clear, however, that we have far to go," Sammons said. "Obviously, we still have no cure to offer, and precious little in terms of treatment. We also have yet to find truly effective methods of reaching major segments of our society that are being ravaged by this epidemic — intravenous drug abusers and minority populations, including the high proportion of women and children infected in these communities. And we still have to deal with a lingering climate of fear and misunderstanding about this disease and those who suffer from it."

• **The legal and ethical debate surrounding** AIDS heated up in 1987. An AMA review showed more than 450 AIDS-related bills introduced in state

legislatures across the nation. Major public health officials and groups agreed during the year that widespread, mandatory HIV screening was not a cost-effective or justified means of fighting the epidemic. At year's end, however, researchers and

*(continued)*



**AIDS in Oklahoma** is the topic as Gregory R. Istre, MD, addresses the fall meeting of the legislature's interim study on AIDS committee. Dr Istre is state epidemiologist and chairman of the Oklahoma State Department of Health's AIDS Task Force.

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## Year in medicine (continued)

government officials were again debating AIDS epidemiologic data. Meanwhile, reports that a St. Louis teenager apparently had the disease in 1969 focused new attention on the origins of HIV; a book sharply critical of early efforts to deal with AIDS brought to light "Patient Zero," who apparently infected scores of victims; and the long-maligned condom finally became the topic of mainstream conversation.


Questions over physicians' obligations in AIDS also flared with reports that some doctors refused to treat infected patients due to concerns for their own safety. The debate was fueled by a statement from the AMA's Council on Ethical and Judicial Affairs that it is unethical for doctors to deny AIDS or HIV-infected patients treatment solely on the basis of their condition.

- **The Food and Drug Administration** approved two long-awaited new heart drugs in 1987: lovastatin, a cholesterol-lowering agent, and tissue plasminogen activator (TPA), a blood clot-dissolving agent. Both were hailed as major advances.

Lovastatin is the first of a new class of drugs that cut cholesterol levels by interrupting the body's cholesterol-synthesis process. In studies, lovastatin reduced levels of total cholesterol and low-density lipoprotein by up to 40%. TPA, meanwhile, is the newest thrombolytic agent approved for treatment of victims of heart attack. Initially rejected by an FDA advisory committee that questioned its effectiveness, TPA works by dissolving the blood clots believed to cause severe heart damage in a significant proportion of heart attack victims.

- **A different drug, 1,2,3,4-tetrahydro-9-aminoacridine (THA)**, generated excitement after published scientific reports suggested it was useful in easing some of the symptoms associated with memory loss in Alzheimer's disease. But the raised hopes of Alzheimer's sufferers were dashed when clinical trials of THA were suspended due to indications of possible liver abnormalities in patients taking the drug.

- **A related development likely to have** far-reaching implications for new drug availability was an FDA ruling implemented in June allowing the use of investigational new drugs (INDs) to treat the desperately ill when no other effective treatment exists. The new policy is designed to make promising experimental drugs available to critically ill patients more quickly than under the traditional system of



### **March 9 encore slated for Medicine Day**

This year's Medicine Day at the State Capitol, the jointly sponsored project of the Oklahoma State Medical Association and the OSMA Auxiliary, will be Wednesday, March 9, 1988.

Medicine Day will begin at 9:00 AM, with registration and orientation taking place in the Oklahoma House of Representatives' Chamber. The day will allow participants the opportunity to meet with their respective representatives and senators, as well as to help promote the more positive aspects of medicine.

Various specialty societies will be setting up booths in the Capitol Rotunda for this special day. Every interested physician, physician spouse, office staff member, nurse, and community leader is urged to attend this all-important event.

phased clinical trials. Some critics, however, raised questions about how patients will pay for these often-expensive new agents.

- **An encouraging, but very preliminary, new** treatment for Parkinson's disease also made headlines during 1987. Mexican researchers described transplanting bits of adrenal gland tissue into the portion of the brain believed to malfunction in Parkinson's, causing its characteristic tremors and other symptoms. The surgery, an improvement upon a similar technique attempted by Swedish researchers several years ago, is now being performed at an increasing number of centers.

(continued)

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## Year in medicine (continued)

Other significant developments in the year in medicine:

- **Increasing debate over whether Epstein-Barr virus (EBV)**, a ubiquitous virus that is the main cause of infectious mononucleosis, is to blame for a widely reported chronic fatigue syndrome. Specialists believe that while some cases of this syndrome may in fact be due to chronic EBV, other factors — still unexplained — probably are at work in most instances.

- **The effort to understand the genetic basis** of disease, and develop potential treatments, moved forward steadily. Researchers zeroed in on genes or genetic markers involved in such problems as a hereditary form of Alzheimer's disease, manic-depression, neurofibromatosis, and colon polyps, and also increased the use of DNA probes for diagnostic purposes. But perhaps the most debated development was the plan for a multi-billion-dollar, federally funded project to map and sequence the entire human genome.

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"False sense of security"

## **Hazard labeling on blood samples adds to risk?**

The use of biohazard labels on blood samples may actually raise the risk that health care workers will be exposed to human immunodeficiency virus (HIV) and hepatitis B (HBV) by fostering complacency in handling unlabeled specimens, concludes a report from Seattle.

The study, by H. Hunter Handsfield, MD, of Harborview Medical Center and the University of Washington School of Medicine, Seattle, and colleagues found that one-third of HIV-positive blood samples submitted to the hospital's clinical chemistry laboratory did not have "biohazard" labels. The same was true for more than 70% of samples from patients infected with HBV.

As a result, the authors suggest that "all clinical and laboratory personnel should handle all blood specimens as if they were infected, regardless of biohazard labeling." In addition, they urge that all clinical and lab personnel be vaccinated against hepatitis B.

The researchers studied the prevalence of hepatitis B surface antigen (HBsAg) and HIV antibody in serum or plasma specimens from 506 patients submitted to the clinical chemistry lab at an urban teaching hospital. These results were correlated with "biohazard" warning labels on the specimens.


"Biohazard labeling was associated with an increased probability of detecting either HBsAg or antibody to HIV, but the absence of a label was not a reliable indication of a non-infectious specimen," the authors say.

"The clinical staff and other personnel responsible for attaching biohazard labels to specimens from infected patients did so for only 67% of those with HIV antibody and 28% of those that contained HBsAg," the authors report. "It is probable that the absence of labels was due more frequently to lack of awareness of the patient's infection with HBV or HIV than to failure to affix labels to known infectious specimens."

The prevalence of HIV seropositivity in this study "probably is similar to that in urban hospitals in many cities experiencing moderate to high prevalences of HIV infection in the at-risk populations," the researchers report. "Our results reinforce the recommendation that all health care personnel be vaccinated against hepatitis B and that all unfixed

clinical specimens be handled as if they were infectious.

"The use of biohazard labels may actually enhance the risk of infection of health care workers by contributing to a false sense of security and fostering complacency in the handling of unlabeled specimens," they conclude. "We therefore recommend that biohazard labeling not be employed to denote specimens from patients with HBV or HIV infection in hospitals or most other clinical settings."

The report appeared in the December 18 issue of the *Journal of the American Medical Association*. 

## **Hospitals required to ask about organ donation**


The Oklahoma Teaching Hospitals (OTH) in Oklahoma City conducted a public awareness day in December to introduce the new Required Request Law regarding organ donation.

The new law requires any hospital facility of 50 beds or more to approach family members of potential organ or tissue donors about donation.

Representatives from the Lion's Eye Bank, American Red Cross, and Oklahoma Organ Sharing Network, and employees from OTH and Veteran's Administration Hospital provided educational material explaining the need for and implementation of organ donation.

The expected benefits of the new law are increased public education to dispel the myths and fears often associated with organ donation and to inform people of the need for organ and tissue donation.

Effective January 1, 1988, the Joint Commission on Accreditation of Healthcare Organizations is requiring chart documentation indicating that family members of potential organ or tissue donors have been informed of their options.

For further information on organ or tissue donation call the Oklahoma Organ Sharing Network at 405-840-5551. 



## Resolution focuses on medical waste disposal

The proper disposal of medical waste products was the subject of a resolution passed at the fall meeting of the Oklahoma State Medical Association's Council on Public and Mental Health.

The resolution was the result of concern expressed by John E. Ward, MD, who represented the Oklahoma State Department of Health. It was subsequently endorsed by the OSMA Board of Trustees and is presented here for the information of Oklahoma physicians:

WHEREAS, Safe disposal of infectious wastes generated in health care facilities and physicians' offices and clinics has become an area of concern nationwide as a result of the fear and anxiety relating to AIDS; and

WHEREAS, The concern has been voiced by sanitation workers, landfill operators, and by

citizens whose children have brought home needles and syringes found in the trash around professional offices. This concern has resulted in a number of liability suits in the East as a result of needle sticks. In some areas, sanitation workers have refused to pick up trash from professional offices; and

WHEREAS, As physicians we have a responsibility to take a lead in correction of this problem. Proper handling and disposal of contaminated materials, such as needles, syringes, and blades can significantly reduce the hazard to our own employees and to those who must handle the wastes after they leave our offices. In addition, this will reduce the potential for liability suits; and

WHEREAS, If we do not assist in resolving this problem now, it may lead to legislative action that would be more difficult and expensive to deal with in the future; now therefore be it

*Resolved*, That the Oklahoma State Medical Association Council on Public and Mental Health recommends that OSMA adopt and support the recommendation of the Centers for Disease Control (CDC) in Atlanta that needles not be recapped after use, and that the needles and syringes and other sharps be placed in puncture-proof containers with tamper-proof lids, and that the materials either be incinerated or disinfected prior to disposal. □

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### IN MEMORIAM

1987

Charles Sylvanus Maben, MD	February 13	Paul Newman Atkins, Jr., MD	April 20
Edward Leon Moore, MD	February 14	John Wesley Williams, MD	May 16
Ralph Cameron Emmott, MD	February 16	John Jerome Coyle, MD	May 21
James Laurel Haddock, Jr., MD	February 19	J. C. Rogers, MD	May 22
Donald J. Blair	March 16	Scott Allen Morris, MD	May 24
Richard M. Burke, MD	March 18	Gladys Christine Smith, MD	May 27
Eldon Clyde Mohler, MD	March 21	John Ronald Watson, MD	June 14
Paul Lewis Nave, MD	March 26	Thomas Arthur Hosty, MD	June 17
George Michael Willkom III, MD	March 30	Dan Cross Galloway, MD	July 12
Odis A. Cook, MD	April 4	Donald Owen Walker, MD	July 21
Lawrence Edward Silvey, MD	April 9	Alwin Marshal Clarkson, MD	September 1
Victor Gary Anderson, MD	April 10	Rex Elmer Kenyon, MD	September 16
Edgar W. Young, Jr., MD	April 12	Charles P. Bondurant, Jr., MD	October 12

Susceptibility also a factor

## ***AIDS transmission more than a numbers game***

The risk of transmitting the AIDS virus through heterosexual relations is not dependent simply on the number of times one has sexual relations with an infected person, according to a report released last month.

While some persons in the study became infected by the human immunodeficiency virus (HIV) after only a few sexual contacts with an infected partner, others remained seronegative after hundreds of contacts, according to the report.

"This is consistent with an as yet unexplained biologic variation in transmissibility or susceptibility," say the study's authors, Thomas A. Peterman, MD, now at the National Institute for Allergy and Infectious Diseases, Bethesda, Md, and colleagues at the Centers for Disease Control, Atlanta, and the New York City Health Department.

Although some researchers have tried to quantify the risk of transmission of HIV through sexual intercourse, the validity of these findings has been questioned because the studies included persons who may have had multiple sexual partners or may not have acknowledged other risk factors, the authors say.

To determine the risk of HIV transmission by female-to-male and male-to-female sexual contact and by nonsexual contact among family members, the authors studied the families of patients who became infected by HIV through blood transfusions. "Compared with families of intravenous drug abusers, these families are less likely to have other risks for HIV infection," they say. "The transfusion-infected persons are unique because their dates of infection are known, allowing quantification of duration and frequency of family members' exposure to them."

The authors studied 106 families of patients with AIDS or with serologic evidence of HIV infection. Serum specimens were obtained from family members, and wives and husbands were interviewed about their sexual practices and about the number of sexual contacts they had had with their spouses since they became infected.

In 80 families, spouses reported having had sexual contact with the infected family members, and 26 reported they did not have sexual intercourse since their spouses became infected. Two (8%) of the husbands and 10 (18%) of the wives of the HIV

patients tested positive for the virus. While one of the seropositive women had had only a single sexual contact with her infected husband and another had only eight, 11 wives remained uninfected after more than 200 sexual contacts with their infected partners. The uninfected wives also averaged more sexual contacts than those who became infected.

The authors conclude that the data indicate heterosexual transmission of HIV is not simply a function of the number of sexual contacts with an infected person. However, they add, the biologic factors responsible for the variation in transmission and/or susceptibility remain to be determined.

According to the study, the family members who had no sexual contact with the index patient included 15 wives, 6 husbands, 19 children, and 23 others. "We found no evidence of transmission in family members without sexual contact even though the 63 participants had lived with the index patients for a total of 140 person-years and had many opportunities for exposure to small amounts of the infected person's saliva, feces, and urine. . . . The risk of transmission in other social settings, such as schools, and offices, is almost certainly even lower than in family settings," the authors conclude.

The report was published in the January 1 issue of the *Journal of the American Medical Association*.



**A REMINDER**  
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The deadline for payment  
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Often mistaken for genital herpes

## ***Chancroid emerging as factor in AIDS spread?***

A dramatic increase in the number of reported cases of chancroid suggests that this infection, which causes genital lesions, is reemerging as a significant sexually transmitted disease in the United States, according to a report from the Centers for Disease Control (CDC) in Atlanta.

The increased incidence of chancroid is generating additional concern since there is mounting evidence that the open lesions of chancroid and other ulcerative diseases have contributed to the rapid spread of AIDS among heterosexual individuals in Africa, say the study's authors, George P. Schmid, MD, and his colleagues at the CDC.

The authors studied surveillance data collected by the CDC since 1935. They found a general decline in reported cases of chancroid from 1947 to 1981; from 1971 to 1980, a mean of only 878 cases was reported annually. Since then, that trend has been reversed by a number of outbreaks around the country. In 1985, for the first time since 1956, more than 2,000

cases were reported. In 1986, there were 3,418 cases, up 65.4% from 1985.

Chancroid is a sexually transmitted disease characterized by genital ulcers and, often, painful swelling of lymph glands in the groin. Although considered a minor venereal disease in the United States, chancroid is a major sexually transmitted disease elsewhere, with a global incidence said to exceed syphilis.

The authors say chancroid has become established as an endemic disease in a number of areas of the United States. Most efforts to eradicate the disease from these areas have not been successful, although some outbreaks have been well controlled.

"Currently, chancroid seems to be confined to selected geographic areas," the authors say. "With intensive control efforts it may be possible to eliminate these outbreaks and minimize spread from these areas."

*(continued)*



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## REACTION TIME

### OSMA trustee moves to Georgia, invites state friends to stop by

*This letter was written to OSMA President M. Joe Crosthwait, MD, on November 12, 1987.*

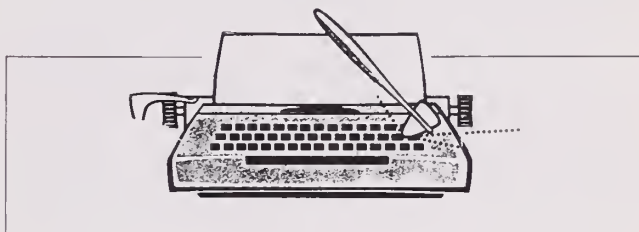
*Dear Dr Crosthwait:* Effective November 27, I intend to re-establish my practice of Obstetrics and Gynecology in Moultrie, Georgia. I have been offered an outstanding opportunity to relocate my practice in the State of Georgia and therefore find it necessary to resign my membership in the Oklahoma State Medical Association, my position as a trustee on the OSMA Board, and also my position as vice-chairman of that Board.

I cannot tell you how important the Oklahoma State Medical Association has been to me in this past 20 years of medical practice and how important my relationship with David Bickham and all of the people at the Oklahoma State Medical Association who work so diligently for my benefit have been to me. I also have a great feeling of sadness on leaving the Board of Trustees of the OSMA. I feel very humble in the knowledge that I have amassed just being around and involved with the people who work so hard to make our state association so outstanding. I will never forget anybody who I've come in contact with in this regard, and if I started naming physicians who I have great respect for, this letter would never end.

I would invite and insist that any one of you who ever passes through southern Georgia on your way to Florida or Hilton Head or anyplace in that area

of the country, please stop and say "Hey!" to me. My address will be available at the Oklahoma State Medical Association on my leaving, and I would implore you to please stop and visit at any time. On leaving, I salute you as a group collectively for, in my opinion, being the finest medical association in this country, bar none. Keep up the good work and please never forget me in the State of Georgia.

*Lanny F. Trotter, MD  
Stillwater*



### Tulsa doctor applauds "Atoms"

*Gentlemen:* Thank you for printing Mr Robert Hardy's article "AIDS and Atoms" in your November issue. The subject of prevention of nuclear war is vitally important to all of us and one we must address as concerned physicians and citizens.

*Harold Dunlap, MD  
Tulsa*

---

### Chancroid spreading AIDS (continued)

In the United States, the preponderance of cases are occurring among men who patronize prostitutes and among individuals who have come from outbreak areas in the United States or from countries where chancroid is endemic.

Chancroid is often mistaken for genital herpes. Because the bacterium that causes the disease, *Haemophilus ducreyi*, is difficult to grow and requires special laboratory techniques, cases of chancroid are rarely confirmed by culture. The infection can be effectively treated either with erythromycin administered orally or ceftriaxone

administered intramuscularly, the authors state.

"Controlling disease in these areas will require prompt recognition of infected patients by clinicians to prevent misdiagnoses that have, in the past, contributed to establishment of ongoing foci of disease," the authors conclude. "In the near future, control of chancroid will depend on traditional approaches: prompt recognition and treatment of patients, evaluation and treatment of sexual contacts whether symptomatic or not, . . . and educational efforts."

The report appeared in the December 11 issue of the *Journal of the American Medical Association*.



## BOOK SHOP

**A History of American Neurology.** By Russell N. DeJong. New York: The Raven Press, 1982, pp 157, illus, \$17.50.

Dr Russell N. DeJong was for several years chairman of the neurology department in a large medical school and editor of a major journal of neurology. The preface of his book states, "This volume, a detailed study of the development of neurology as a science and a medical discipline in the United States, focuses on the backgrounds as well as the accomplishments of the many American physicians and scientists who have contributed to our knowledge of the nervous system. It is intended to provide the reader with a fascinating and informative account of the noteworthy events that have occurred in American neurology."

The first three chapters follow the story of the early evolution of American neurology. The establishment of neurology as a special discipline in American medical education and practice; the close association between neurology and psychiatry; the men who are known as the fathers of American neurology, Silas Weir Mitchell and William Alexander Hammond;

and the founding of the American Neurological Association are discussed. This is followed by chapters dealing with specific persons who have made important contributions in the field of neurology in the latter part of the nineteenth century and in the twentieth century. The next several chapters cover the rapid expansion of clinical neurology in the twentieth century.

The author describes the founding of the American Neurological Association in 1875 and the New York Neurological Institute in 1909. In the final chapter there is discussion of new societies, military neurology, and the American Board of Psychiatry and Neurology.

A significant portion of the book is occupied by brief biographical sketches of various persons in the neurological disciplines. For the most part these give only "hard" biographical facts, such as the education and training of the individual, and abbreviated comments about his contributions and/or publications. These sketches rarely provide other information about many of these persons who were so important in the development of this discipline. For



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example, few of the interesting anecdotes about the fathers of neurology, Mitchell and Hammond, are given. There are certain errors such as the date of Dr Sam L. Clark's death (page 104). Little attention is given to the contributions outside of neurology of some of those included. For example, there is no mention of the contributions of John F. Fulton in medical history and his biography of Harvey Cushing.

This small book contains valuable historical information. Yet it gives us the basic historical development while failing to tell us why an event happened or other interesting aspects of it. It can be hoped that with subsequent editions and building on the basic structure contained in this edition, a more complete historical picture of this discipline will be projected.

Harris D. Riley, Jr., MD  
Oklahoma City

**Current Pediatric Therapy — 10.** By Sydney S. Gellis and Benjamin M. Kagan. Philadelphia: W.B. Saunders Co., 1982, illus, pp 778, \$49.00.

*Current Pediatric Therapy*, in its 10th edition, continues to be a basic reference source for management of the innumerable disease conditions that occur in infancy and childhood. Drs Gellis and Kagan have recruited well known contributors for this volume. As in previous editions, the authors assume that the proper diagnosis has been made, and emphasis is given only to management of the topic at hand. Tables, some of which are new, are incorporated in the chapters and enhance the information for the reader. Several new chapters, which reflect changes in management and recent advances, have been added. The number of articles on the newborn has increased, new information on *Campylobacter* infections has been added, and there is a helpful chapter on the transport of sick infants and children between institutions.

This edition maintains the high quality of earlier ones and continues as an excellent and standard compendium of pediatric therapeutics. It should be available to all physicians who treat children.

Harris D. Riley, Jr., MD  
Oklahoma City

#### **Current Clinical Topics in Infectious Diseases**

**4.** Edited by Jack S. Remington and Morton N. Swartz. New York: McGraw-Hill, 1983, pp 423, illus, \$45.00.

This volume contains detailed reviews and

critical commentaries on a variety of subjects which are timely and pertinent in infectious diseases. It contains 16 essays written by experienced clinicians.

One group of articles deals with the place of newer radiologic techniques in diagnosis. These include excellent discussions of the role of echocardiography in infectious endocarditis, the role of radionuclide imaging in the management of skeletal infections, and the use of white blood cell scanning techniques in a variety of different infectious diseases.

Another group of articles deals with antimicrobial agents. These include discussion of methods for clinical quantitation of antibiotics, a review on the clinical significance of tolerance to beta-lactam antibiotics, and excellent discussions of the newer aminoglycoside antibiotics and the third-generation cephalosporins. The volume also contains three reviews that deal with maternal-fetal-neonatal problems. One of these discusses the diagnostic approach to the febrile postpartum patient and another the diagnosis and management of vaginal infections. Particularly useful is the chapter about management and delivery of the mother and infant when pregnancy is complicated by herpes simplex, varicella-zoster, hepatitis, or tuberculosis.

Another group of articles consists of reviews of specific types of problems encountered in infectious diseases, including their diagnosis and management. Problems discussed include septic arthritis, Kawasaki's disease, the use of oral antibiotics in the management of hematogenous osteomyelitis, orbital infections, antimicrobial prophylaxis in the immunosuppressed cancer patient, and a useful chapter on the optimal recovery period before an infected hospital employee can return to work.

In general each subject is thoroughly reviewed, with the review well written and including pertinent and timely references. The volume is of high quality and is strongly recommended for the clinician concerned with problems in infection.

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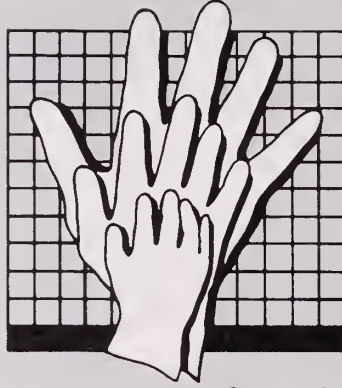
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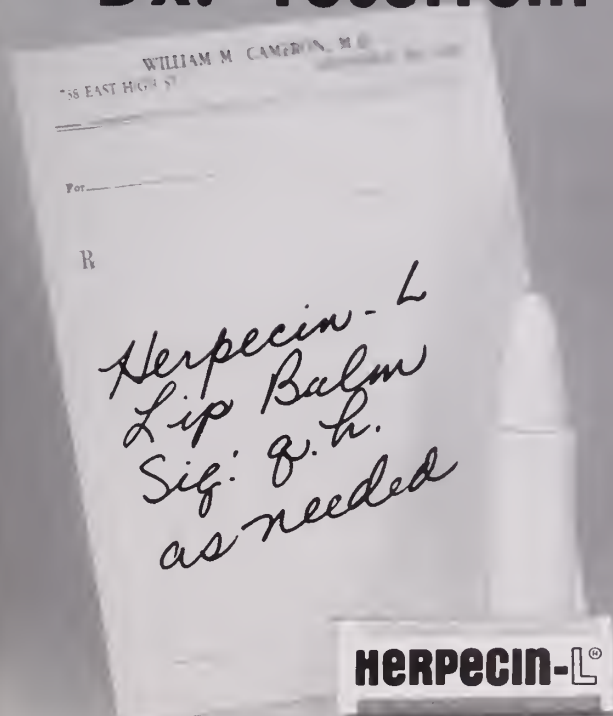
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### Contributions

Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

### An opportunity to participate in democracy

**VOTING**—An American right, privilege, and responsibility. It is an election year in which another President will be voted into office. The candidates are being assessed from many positions. In just a short time, Oklahomans will be participating in the Super Tuesday process of determining how each parties' delegates will be bound to vote for President. Oklahoma is utilizing this method of delegate decision for the first time. The success of it reflecting the majority opinion of Oklahomans is tied to the number of Oklahomans voting on Super Tuesday. Another way to look at this outcome is that only those exercising their privilege to vote will determine which candidate their party will support. The next President will have an agenda that may or may not follow the needs of the state. In addition, medicine, with its many agendas and priorities, may not be high on that President's list.

As a citizen of Oklahoma and the United States, please vote! Please express your opinion!! Please become involved if only at this level!!!

### Medicine Day: An invitation to a capitol event

On Wednesday, March 9, 1988, the Oklahoma State Medical Association and the OSMA Auxiliary are sponsoring the second annual Medicine Day at the Capitol. All friends of medicine are invited to attend the scheduled sessions, which will include an opening program in the House Chamber, lunch, and

additional sessions to be held at the State Historical Society. The afternoon meetings will include panel discussions on issues affecting state and national concerns and their impact on the practice of medicine.

Issues affecting medicine include mandatory assignment; AIDS transmission as it affects both the public and health care personnel, and also treatment issues; physician dispensing; tort reform; mandatory testing for disease (in particular, AIDS); tobacco and smoking regulations, including advertising; and many others. The Medicine Day committee has



designed a very informative one-day event. Attendance at 1987's rally gave the legislators a real message—physicians and their spouses care and are willing to show their support in meeting their legislators on a personal level.

Make plans to attend this very important meeting. You can make a difference on a local level, and on state and national levels as well. Medicine Day can be that first step toward becoming informed and involved. Remember that your vote counts, and attend Medicine Day. Professional society exhibitors will be providing information and screening. Your involvement is needed for success. See you there!

*Nadine Spring Nickeson  
OSMAA Legislation Co-Chair*



## THE LAST WORD

■ **George F. Robie, Jr., MD**, assistant professor of obstetrics and gynecology at the University of Oklahoma Health Sciences Center, will deliver the next lecture in OUHSC's 1987-88 Dean's Lecture Series. Open to the public, the series is designed to provide Oklahoma citizens with the most current information on timely and important issues relating to human health. Dr Robie's lecture, "Mending Broken Hearts and Broken Kids: A New Look at Birth Defects," is scheduled for 8 PM, Wednesday, March 16, in the OUHSC Library Auditorium. For more information on the lecture series, call the OUHSC Public Information Office, (405) 271-2323.

■ **Clayton Rich, MD**, provost and vice-president for health services at OUHSC, was recently voted chairman-elect of the Association of Academic Health Centers.

■ **Kevin Walker**, former head of the American Medical Association's state and county medical society relations department and AMA liaison to Oklahoma, has been appointed director of the Department of Political Action for the American Medical Political Action Committee (AMPAC). He will be based in Washington, DC.

■ **PLICO-insured physicians are reminded that** they are required to attend at least one PLICO Loss Prevention Seminar every three years to maintain their eligibility for coverage. The 1988 seminar schedule has been announced, and many of the programs have been scheduled early in the year to allow physicians to get them out of the way as quickly as possible. Sites for this year's seminars include Oklahoma City, Guymon, Woodward, Elk City, Lawton, Enid, Lake Texoma, McAlester, Shangri-La Resort, and Tulsa. For registration information, contact Debbie Hinson at OSMA headquarters.

■ **John W. Records, MD, Oklahoma City**, has been honored with the establishment of a fund in his name at the Oklahoma City Community Foundation. A retired obstetrician-gynecologist, Dr Records

practiced at the Oklahoma City Clinic and was on the clinical faculty of the University of Oklahoma College of Medicine. He was recently awarded the Lifetime Achievement Award from Planned Parenthood of Central Oklahoma for his many years of service to the community in both private practice and teaching. Income from the name fund will be used by Planned Parenthood to continue the work begun by Dr Records.

■ **Tulsa internist Richard J. Young** is featured in a member profile in December's *Tulsa Medicine*. A man of many interests, Dr Young was invited by the Tulsa County Medical Society Auxiliary to design their fund-raising holiday card this year. His interest in painting began in grammar school, when he lived in the country and enjoyed painting scenes of fields and barns. Dr Young's creative drive has also lead him into woodworking, making stained glass windows and lamps, and growing orchids.

■ **Perry A. Lambird, MD, Oklahoma City**, has taken office as a governor of the College of American Pathologists (CAP). He has been appointed for one year to fill a vacancy and was sworn into office at the fall meeting of CAPS, held in New Orleans. Dr Lambird has been very active with CAP, having served as a governor, a member of the steering committee for the House of Delegates, and chairman of the Commission on Clinical Pathology and the Council on Pathology Practice and Management. He has also been a member of numerous other CAP committees and commissions.

■ **A recent Epcot Poll of 3,509 adult visitors** at Walt Disney World in Florida showed them to be almost evenly divided on the idea of requesting generic brand drugs when they have their prescriptions filled. When asked, "How often do you have your prescriptions filled with generic drugs?" 47% indicated they ask for generics "frequently" or "sometimes," while 42% answered "rarely" or "never."



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## % Reduction in Somatic Symptoms<sup>2</sup>

Vomiting	Nausea	Headache	Anorexia	Constipation
Reduced 90%	Reduced 86%	Reduced 72%	Reduced 62%	Reduced 60%

- Only 1/3 the dropout rate due to side effects of amitriptyline alone, although the incidence of side effects is similar<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.


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## In moderate depression and anxiety

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**References:** 1. Feighner JP, et al. *Psychopharmacology* 61: 217-225, Mar 22, 1979. 2. Data on file, Hoffmann-La Roche Inc., Nutley, NJ.

### Limbitrol<sup>®</sup> Tranquillizer—Antidepressant

**Before prescribing, please consult complete product information, a summary of which follows:**

**Indications:** Relief of moderate to severe depression associated with moderate to severe anxiety.  
**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants. Do not use with monoamine oxidase (MAO) inhibitors or within 14 days following discontinuation of MAO inhibitors since hyperpyretic crises, severe convulsions and deaths have occurred with concomitant use, then initiate cautiously, gradually increasing dosage until optimal response is achieved. Contraindicated during acute recovery phase following myocardial infarction.

**Warnings:** Use with great care in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur in patients taking tricyclic antidepressants and anticholinergic-type drugs. Closely supervise cardiovascular patients. (Arrhythmias, sinus tachycardia and prolongation of conduction time reported with use of tricyclic antidepressants, especially high doses. Myocardial infarction and stroke reported with use of this class of drugs.) Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations as suggested in several studies. Consider possibility of pregnancy when instituting therapy; advise patients to discuss therapy if they intend to or do become pregnant.

Since physical and psychological dependence to chlordiazepoxide have been reported rarely, use caution in administering Limbitrol to addiction-prone individuals or those who might increase dosage, withdrawal symptoms following discontinuation of either component alone have been reported (nausea, headache and malaise for amitriptyline, symptoms [including convulsions] similar to those of barbiturate withdrawal for chlordiazepoxide).

**Precautions:** Use with caution in patients with a history of seizures, in hyperthyroid patients or those on thyroid medication, and in patients with impaired renal or hepatic function. Because of the possibility of suicide in depressed patients, do not permit easy access to large quantities in these patients. Periodic liver function tests and blood counts are recommended during prolonged treatment. Amitriptyline component may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady state concentrations of the tricyclic drugs. Concomitant use of Limbitrol with other psychotropic drugs has not been evaluated, sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Limbitrol should not be taken during the nursing period. Not recommended in children under 12. In the elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects.

**Adverse Reactions:** Most frequently reported are those associated with either component alone: drowsiness, dry mouth, constipation, blurred vision, dizziness and bloating. Less frequently occurring

reactions include vivid dreams, impotence, tremor, confusion and nasal congestion. Many depressive symptoms including anorexia, fatigue, weakness, restlessness and lethargy have been reported as side effects of both Limbitrol and amitriptyline. Granulocytopenia, jaundice and hepatic dysfunction have been observed rarely.

The following list includes adverse reactions not reported with Limbitrol but requiring consideration because they have been reported with one or both components or closely related drugs.

**Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke.

**Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania and increased or decreased libido.

**Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns.

**Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract.

**Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus.

**Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia.

**Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue.

**Endocrine:** Testicular swelling and gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion.

**Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Overdosage:** Immediately hospitalize patient suspected of having taken an overdose. Treatment is symptomatic and supportive. IV administration of 1 to 3 mg physostigmine (silylate) has been reported to reverse the symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**Dosage:** Individualize according to symptom severity and patient response. Reduce to smallest effective dosage when satisfactory response is obtained. Larger portion of daily dose may be taken at bedtime. Single h.s. dose may suffice for some patients. Lower dosages are recommended for the elderly. Limbitrol DS (double strength) Tablets, initial dosage of three or four tablets daily in divided doses, increased up to six tablets or decreased to two tablets daily as required. Limbitrol Tablets, initial dosage of three or four tablets daily in divided doses, for patients who do not tolerate higher doses.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt). Available in bottles of 100 and 500, Tel-E-Dose<sup>®</sup> packages of 100, Prescription Paks of 50.

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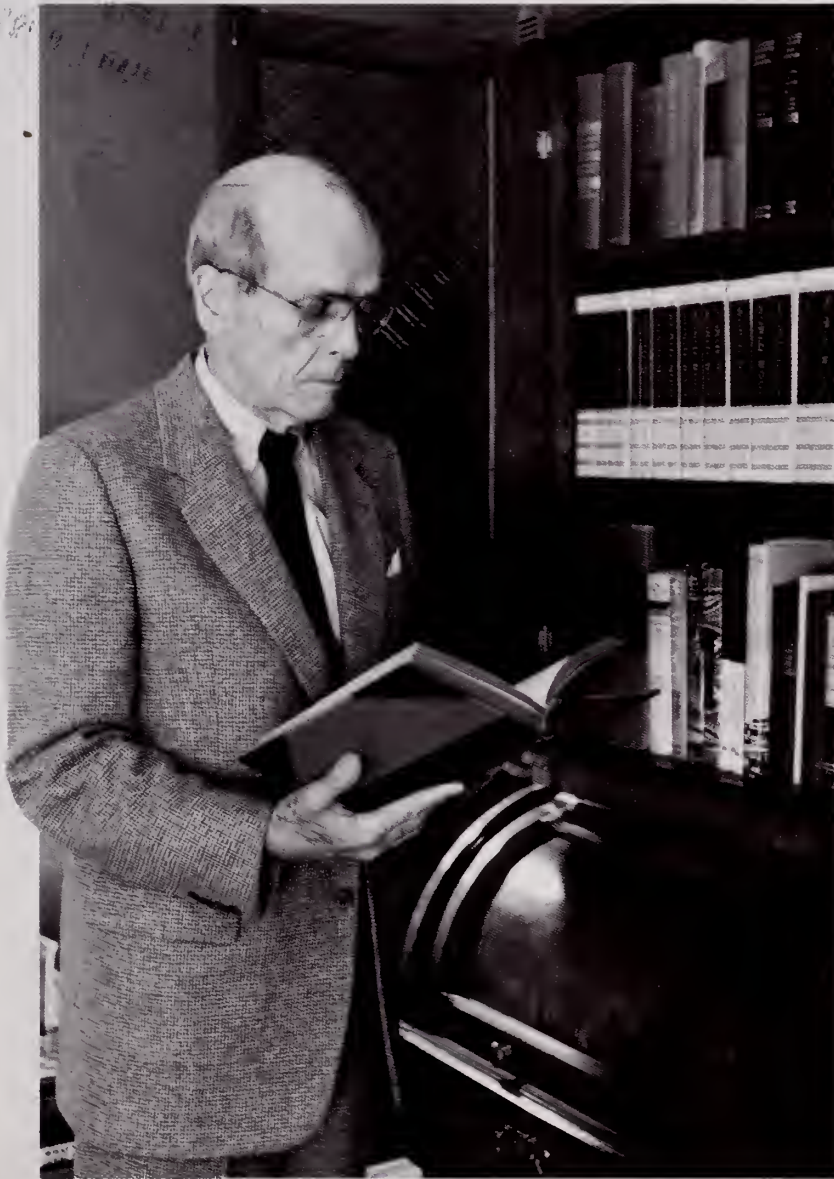
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Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975, 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980, 93; 588-96.

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**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

**PRECAUTIONS:**

**Special Risk Patients:** VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

**Information For Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic Effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.

**Labor and Delivery:** Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSAGE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.

The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982.

5685

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978
2. Beaver, WT *Arch Intern Med*, 141:293-300, 1981.

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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION

MARCH 1988

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This month the JOURNAL honors another Leader in Medicine, John W. Records, MD. The story begins on page 146.

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**Action:** Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it, however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

**Indications:** Yocon<sup>®</sup> is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

**Contraindications:** Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

**Warning:** Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

**Adverse Reactions:** Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.<sup>1,2</sup> Also dizziness, headache, skin flushing reported when used orally.<sup>1,3</sup>

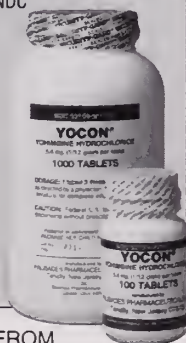
**Dosage and Administration:** Experimental dosage reported in treatment of erectile impotence.<sup>1,3,4</sup> 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.<sup>3</sup>

**How Supplied:** Oral tablets of Yocon<sup>®</sup> 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

#### References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

**CONTRAINDICATIONS:** Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

**WARNINGS: Hyperkalemia—**In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

**Interaction with Potassium-Sparing Diuretics—**Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

**Gastrointestinal Lesions—**Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40-50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

**Metabolic Acidosis—**Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

**PRECAUTIONS:** The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

**Laboratory Tests:** Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

**Drug Interactions:** Potassium-sparing diuretics; see **WARNINGS**.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Long-term carcinogenicity studies in animals have not been performed.

**Pregnancy Category C:** Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

**Nursing Mothers:** The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:** One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS, WARNINGS, and OVERDOSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS and WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

**OVERDOSAGE:** The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS and WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

1. Elimination of foods and medications containing potassium and of potassium-sparing diuretics.  
2. Intravenous administration of 300 to 500 ml/hr of 10% dextrose solution containing 10-20 units of insulin per 1,000 ml.

3. Correction of acidosis, if present, with intravenous sodium bicarbonate.

4. Use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

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## BRIEF SUMMARY

### CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

### PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that the simultaneous administration of CARAFATE with tetracycline, phenytoin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. The clinical significance of these animal studies is yet to be defined.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** No evidence of drug-related tumorigenicity was found in chronic oral toxicity studies of 24 months' duration conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies have not been conducted.

**Pregnancy:** Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients, adverse effects were reported in 121 (4.7%). Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

### DOSAGE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

### HOW SUPPLIED

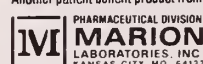
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Issued 3/84

### References:

1. Grossman MI: *Scand J Gastroenterol* 58 (suppl 15):7-16, 1980.
2. Marks IN, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly*. Edinburgh, Churchill Livingstone, 70-81, 1984.
3. Krentz K, Jablonowski H, in Hellemans J, Vantrappen G (eds): *Gastrointestinal Tract Disorders in the Elderly*. Edinburgh, Churchill Livingstone, 62-69, 1984.

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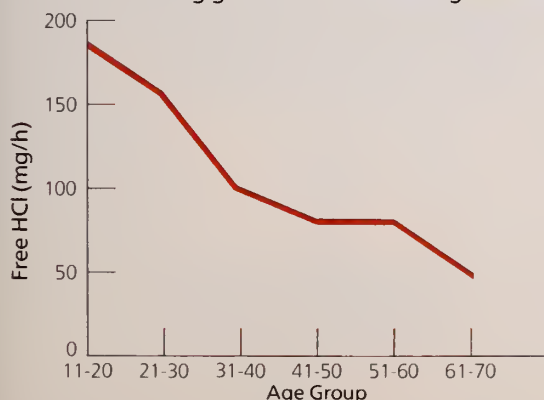
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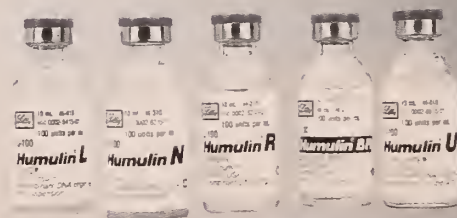
The clinical significance of insulin antibodies in the complications of diabetes is uncertain at this time. However, high antibody titers have been shown to decrease the small amounts of endogenous insulin secretion some insulin users still have. The lower immunogenicity of Humulin has been shown to result in lower insulin antibody titers; thus, Humulin may help to prolong endogenous insulin production in some patients.

**Any change of insulin should be made cautiously and only under medical supervision.** Changes in refinement, purity, strength, brand (manufacturer), type (regular, NPH, Lente®, etc), species/source (beef, pork, beef-pork, or human), and/or method of manufacture (recombinant DNA versus animal-source insulin) may result in the need for a change in dosage.

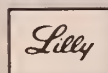
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Loren G. Martin, Ph.D., Program Coordinator, DME, OCOMS (918) 584-1469

APPROVED FOR 14 HOURS OF AMA CATEGORY I AND AAFP PRESCRIBED CREDIT

### SATURDAY, MAY 14, 1988

- 7:00 AM Registration and Continental Breakfast (provided)  
7:45 AM Welcome: Clyde B. Jensen, Ph.D. (OCOMS)  
8:00 AM AIDS — Overview and Epidemiology from a  
National Perspective: John Harkess, M.D. (CDC)  
8:30 AM Psychological Impact of AIDS upon the Health  
Care Delivery System — David Baron, D.O.  
(NIMH)  
9:30 AM Coffee Break (provided)  
9:45 AM Therapeutics of Opportunistic Infections and Anti-  
viral Therapy in AIDS Patients — Francis Blais,  
D.O. (TCOMS)  
10:55 AM Staging and Protocol Requirements for More  
Effectively Treating AIDS Patients — Lawrence  
R. Deyton, M.D. (NIH), and Jeffrey A. Beal,  
M.D. (Tulsa)  
12:05 PM Lunch with Speaker (provided) — Nutritional  
Needs of AIDS Patients — Martin W.  
Banschbach, Ph.D. (OCOMS)  
1:05 PM Relationship between AIDS and Cancer —  
Parkash Gill, M.D. (USC)  
2:15 PM Confidentiality of Patient Records, Insurance  
Company Policies, and Discriminatory Practices  
— Bryn J. Henderson, D.O., J.D. (COMP)  
3:15 PM Coffee Break (provided)

- 3:30 PM AIDS — The Role of Public Health Counseling —  
Beth Dahl, R.N.C. (Oklahoma State Department  
of Health)  
4:30 PM Risk Exposure for Medical and Dental Health  
Care Providers — Dan H. Fieker, D.O. (OOH),  
and Kenneth R. Goljan, D.D.S., M.S. (Tulsa)  
5:30 PM ADJOURN

### SUNDAY, MAY 15, 1988

- 7:00 AM Registration and Continental Breakfast (provided)  
7:30 AM The Future Directions of a Statewide and a  
Metropolitan AIDS Program — Ron Toth,  
M.P.H. (Oklahoma State Department of Health)  
and Bill Pierson, M.B.A. (Tulsa City-County  
Health Department)  
8:30 AM Psychiatric Manifestations in the AIDS Patient  
— David Baron, D.O. (NIMH)  
9:30 AM Coffee Break (provided)  
9:45 AM Psychological Influences on Immunity — Janet  
Kiecolt-Glaser, Ph.D. (Ohio State University)  
10:45 AM The Role of Social Work with AIDS — Sue  
Cooper, M.S.W., C.S.W.-A.C.P. (Houston)  
11:45 AM Chronic Pain Control in AIDS and Oncology Pa-  
tients — Winston Parris, M.D. (Vanderbilt  
Medical Center)  
12:45 PM Doubletree Brunch (provided)

Meal functions are provided for registered participants only — additional tickets may be purchased at the registration table.



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### Doctors, Teachers, and AIDS

Among the many things not needed in today's world is another editorial about the adult immune deficiency syndrome (AIDS). If words were pennies, I am sure the fortunes amassed by the cumulative treatises addressing the subject of AIDS would finance the costs of caring for all its victims as well as the discovery of its cure.

In spite of the volumes written about AIDS, in spite of the billions of words uttered about it, irrespective of the educational efforts expended to promote a greater understanding of the disease, there remains the enduring, omnipresent lunatic fringe of the population that refuses to learn. In addition, there are the usual flocks of mind vultures that recognize the carrion of ignorance and fear and use it to nourish their own perverse and corrupt ambitions.

Although understandable, even anticipated among the nonmedical segments of the population, opportunistic distortion of the facts about this tragic malady promoted and publicized by members of the health profession is unforgivable and reprehensible.

Politicians, preachers, and moralists can be forgiven for their less than reliable knowledge of the disease and their noneducational objectives in using it as a proselyting tool. They rarely pretend expertise, and the public does not rely upon them for expert medical advice. At worst, they may exaggerate emotional reactions to the level of hysteria; at best they can help mobilize personal and social resources that will enhance our conquest of AIDS.

The uniformed or misinformed health professional is, however, quite a different entity. Looked upon as the ultimate medical authority, the physician bears the responsibilities of the expert. The physician must keep informed of the facts relating to AIDS as a disease; an epidemiological entity capable of producing fatal consequences, for

which there is currently no means for certain verification of its absence, no documented evidence of natural, acquired, or induced immunity, no complete understanding of its pathogenicity, and no known cure.

AIDS is a lethal plague in transition. Its history is evolving day by day, event by event, fact by fact. What is not known today may be learned tomorrow. Eventually, our ignorance will be displaced by knowledge. For this reason, our imperatives as physicians are acute in the face of this enigmatic viral invasion. We must live up to our designation as doctors-teachers. We must maintain a store of knowledge about AIDS that is current, complete, and meticulously factual. And we must be effective, objective communicators, able to expose untruths and demagogues, deceptions and fools.

As physicians, we are entitled to be politicians, preachers, and moralists. We have a right to express our personal opinions and to recruit support for them. But, when we speak as physicians or act as physicians, we must maintain a rigid adherence to the principles of professional integrity. The words we speak must be honest, and the actions we take must maintain a rational, logical harmony with the body of factual knowledge pertaining to any subject — in this case, AIDS.

Should you decide to speak or act as a politician or a preacher or a moralist but you *are* a physician, you have an obligation to your patients, your colleagues, your profession, and your society to identify the role you are assuming, clearly and concisely separating it from your role as a doctor, a teacher.

Should you fail to achieve this distinction, you will become part of the problem presented by AIDS and certainly not part of the solution.

—MRJ

### Fat, Dumb, and Happy

Several weeks ago I received a number of phone calls from irate, indignant colleagues complaining about an ill-advised comment made to the media by a hospital administrator; reportedly he remarked that physicians had abrogated some of their medical responsibilities to the "supernurse" while we (the physicians) sat there "fat, dumb, and happy." The callers wanted instant retribution and redress.



Having dealt with the media on many occasions, I considered the source of the article and the distinct possibility that there was either a misquote or the remark had been taken completely out of context. To my own satisfaction, I am sure the latter is true.

Nevertheless, as your president, I began to think about what might be said in rebuttal on behalf of our membership.

It occurred to me that we have a large number of colleagues in specialties and supersubspecialties who are doing quite well in the present economic environment of medicine. These are the physicians who raise the "average" income of the physician to the high levels often quoted by the media in defense of the continuing reduction in medical care funds, perpetuation of the MAACs, and the popular myth that all physicians are "rich."

Then we have those who continue to refer, for whatever reasons, to those physicians whose fees are inappropriate for their time and skills but who continue to contribute to the "average income."

Your rarely see this breed at the county medical society meetings or committee meetings on behalf of organized medicine and/or their colleagues. You may

see them in the society pages of the newspaper. To take time to attend their state association meeting is out of the question. They have little concept of what is happening to the majority of their colleagues. The trap has not sprung on them yet. (It will.)

Then we have those who continue to be optimistic, thinking that it can't get any worse. I think we all are or have been in this camp from time to time. These individuals forget the ultimate goal of the bureaucrats and some politicians, and that is to control medicine and the doctors. Yes, this sounds paranoid, but think about it for a moment.

Then there are those who continue to allow encroachment on the practice of medicine from any and all quarters. They would deny the right of a well-qualified physician to practice certain skills, while encouraging midwifery and other less skillful inroads into the practice of medicine.

Then there are those who see and know what is happening to the practice of medicine and the delivery of health care, who do not heed the warnings, who for various reasons do little or nothing to protect the greatest health care system in the world (still).

While I continued to cogitate about these and many other facets of the situation that I have observed over the past few years, I could do nothing but ask myself . . .

Are we fat, dumb, and . . . happy?

I don't know . . .

P.S. If I have not sufficiently alienated all or most of you by now . . . tune in next month.

# Invasive Pulmonary Aspergillosis

Holly M. Heaver, MD

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*Invasive pulmonary aspergillosis is a disease of increasing frequency. It should be considered in the differential diagnosis of the pulmonary infiltrate in the immunocompromised host.*

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Successful medical management of the immunocompromised host requires the clinician to be alert to the possibility of fungal disease. In that context, mucor, nocardia, and aspergillus have been discussed extensively. Aspergillus pulmonary disease is of special interest in that its manifestations in the immunocompromised host differ markedly from its clinical appearance in patients with an intact or atopic immune status.<sup>1</sup>

Immune system dysfunction in the setting of malignancy and cytotoxic drug administration appears to predispose the host to the manifestation of aspergillus in its most virulent form.<sup>1-13</sup>

This paper will discuss the etiological factors, clinical appearance, diagnosis, and therapy of invasive aspergillus pulmonary disease.

Although there have been occasional reports of invasive aspergillus pulmonary disease occurring in an apparently immune-intact host,<sup>2,12,13</sup> the vast majority of cases have been noted in patients with various hematologic malignancies.<sup>1-13</sup>

## ETIOLOGIC FACTORS

Most series cite acute leukemia as the most common underlying disease.<sup>1,2,5,9,10</sup> Other illnesses in which either myelosuppression or pancytopenia are prominent — eg, chronic myelogenous leukemia, Hodgkin's disease, and aplastic anemia — are also of predisposing significance. A relatively small number of cases has been reported in patients with coexistent connective tissue disease.<sup>2</sup>

Studies of the common predisposing factors and immune deficiencies in the above-mentioned illnesses have produced few absolute conclusions. There is general agreement, however, that cytotoxic chemotherapy, recent or concurrent therapy with broad-spectrum antibiotics, supraphysiologic doses of adrenal glucocorticosteroids, leukopenia  $<1000$  cells/mm<sup>3</sup>, acute leukemia in relapse, or acute rejection of organ transplant, and an absolute polymorphonuclear (PMN) leukocyte count  $<500$ /mm<sup>3</sup> of peripheral blood are associated with the appearance of aspergillus disease in its most invasive form.<sup>1-4,14</sup>

Recent investigations with both in vitro murine and human cell lines and in vivo murine cells indicate that two lines of immune defense exist against aspergillus.<sup>3</sup> The macrophage forms the initial phase of defense against invasive disease by killing fungal conidia.<sup>3</sup> Adrenal glucocorticosteroids impair conidial killing.<sup>3</sup> The PMN leukocyte is responsible for mycelial killing. It is suggested that both lines of immune defense must be breached for invasive disease to occur.<sup>3</sup> How *both* lines of defense

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are rendered ineffective in settings other than hematologic malignancy or its therapy — eg, in cirrhosis, postinfluenza, connective tissue disease, etc, — remains obscure.

Aspergillosis is the most common fungal pneumonia in immunosuppressed and myelosuppressed patients.<sup>4</sup> Invasive aspergillosis begins almost exclusively as a pulmonary infection.<sup>1,3</sup> Hematogenous dissemination accounts for its appearance in multiple other organs — most commonly the brain, kidney, liver, heart, and other viscera — although skin, sinus, adrenal, and gonadal involvement have been reported.<sup>2,3,11,15</sup>

Supporting evidence for a respiratory portal of entry for aspergillus is provided by a demonstrated link between acute pulmonary aspergillosis and environmental aspergillus contamination and inhalation by patients in a cancer hospital and in a transplant unit.<sup>1</sup>

## CLINICAL ASPECTS

The clinical appearance of invasive aspergillosis is dramatic. It typically involves the onset of fever (or persistent fever) and lung infiltrate in the granulocytopenic patient who has been treated with broad-spectrum antibiotics for longer than one week.<sup>1,3,4,15</sup> The other most common presenting complaint is dyspnea.<sup>3</sup> Cough may or may not be present.<sup>1,3</sup> When present, it generally is nonproductive of sputum.<sup>14</sup> Pleuritic chest pain is common, and physical examination may disclose a pleural friction rub.<sup>1,3</sup> When the pleuritic chest pain, friction rub, and new infiltrate are accompanied by the frequent hemoptysis typical of invasive pulmonary disease, it is not unusual for this infection to be misidentified as an acute pulmonary embolus with infarction.<sup>1,3,14</sup>

The radiographic pattern of invasive aspergillus disease is variable. The most common initial finding is a patchy, multifocal, peripheral bronchopneumonia,<sup>1</sup> with subsequent consolidation.<sup>14</sup> Miliary radiographic presentations have been reported.<sup>1</sup>

## DIAGNOSIS

Antemortem diagnosis of invasive pulmonary aspergillosis historically has been exceedingly difficult. Until recently, it was not clear how the clinician was to regard the single positive sputum culture for aspergillus in the immunocompromised host: as a contaminant, as representative of coloniza-

tion, or as a pathogenetic entity. Recent work has demonstrated that the single positive sputum culture from a patient clinically predisposed to invasive aspergillosis (eg, a patient who is granulocytopenic, and/or receiving supraphysiologic doses of corticosteroids, antimicrobial agents, or cytotoxic drugs) rarely represents laboratory contamination. Instead, it strongly suggests the diagnosis of invasive disease.<sup>3,14</sup>

Blood, cerebrospinal fluid, and bone marrow cultures virtually never are positive for aspergillus — even in fulminant disease.<sup>4,14</sup>

**Aspergillosis is the most common pneumonia in immunosuppressed and myelosuppressed patients.**

Serologic tests to detect antibodies in patients with aspergillosis have been developed, but are of limited utility. The typical immunocompromised patient with aspergillosis has little capacity to elaborate antibodies, thereby rendering such a screening test a pathophysiologic near-miss.

Serum precipitins as measured by counter-immunoelectrophoresis, enzyme-linked immunoadsorbent assay, and passive hemagglutinin assays have been positive in 70% to 80% of patients with invasive pulmonary aspergillosis.<sup>16</sup> Unfortunately, the specificity and predictive value of a single antibody titer of this nature is low, and the most valuable information appears to result from serial serologic testing, with seroconversion prompting early treatment.<sup>3</sup>

Diagnosis of invasive aspergillosis occasionally may be made at extrapulmonic sites. Nasal cultures have been evaluated in this context.<sup>5</sup> In a 1979 study at a cancer referral center, Aisner et al screened 125 patients with routine nasal cultures. Of the 125 patients screened, 11 had nasal swabs positive for aspergillus. A total of 18 patients had invasive aspergillosis. Ten of the 11 patients with positive nasal swabs developed pulmonary aspergillosis. In 7 of the 10, positive nasal cultures predated the pulmonary manifestations. Seven patients who

developed aspergillosis, however, had negative nasal swabs. While this test may be predictive and helpful when positive, it is not sensitive enough to be considered wholly reliable for diagnostic purposes.<sup>5</sup>

Also possibly suggestive of pulmonic invasive disease are positive cultures of the maxillary sinus (by drainage or biopsy) or biopsy of skin lesions.<sup>3,11</sup> Often, however, it is necessary to pursue a pulmonary invasive procedure to substantiate the diagnosis.

Pulmonary aspergillosis has been diagnosed by bronchial brushings, percutaneous transthoracic needle aspiration, transbronchial biopsy via the fiberoptic bronchoscope, and open lung biopsy.<sup>4</sup> In-depth consideration of which factors determine the procedure-of-choice for a given patient is beyond the scope of this work. Nevertheless, there are important factors which must be assessed in the diagnosis and treatment of the patient with invasive pulmonary aspergillosis; these include, of course, the general condition of the patient, the nature of the underlying disease or diseases, and the diagnostic yield of the procedure — together with its possible complications.

Bronchial brushings and transthoracic needle biopsy have been efficacious in the diagnosis of infectious etiologies of lung infiltrates in the immunocompromised patient, but fail to provide the tissue necessary to accommodate the determination of possible malignancy.

Fiberoptic bronchoscopic biopsy can obtain adequate tissue greater than 90% of the time; it can provide the sample necessary for diagnosis in approximately 70% to 80% of diffuse and local infiltrates.<sup>7</sup> Yield is higher when an infectious, rather than malignant process is responsible for the infiltrate.<sup>6,7</sup>

Open lung biopsy has a diagnostic accuracy of greater than 90% and remains the "gold standard" for premortem diagnosis of pulmonary infiltrates in the immunocompromised host.

Regardless of the diagnostic procedure chosen, when aspergillus pulmonary disease is suspected, early and aggressive attempts at definitive diagnosis should be made. Patient survival depends on rapid diagnosis and prompt initiation of therapy with amphotericin B.<sup>14</sup>

## THERAPY

The proper dosage and duration of treatment with amphotericin B is unknown. The total dosages administered to responding patients with invasive

pulmonary disease have varied between 110 mg and 3.1 g.<sup>3</sup> Dosage and duration of therapy are determined by clinical parameters such as defervescence and radiographic clearing of infiltrates. Unfortunately, the clinical improvement of patients may be misleading; aspergillus relapses months later have been reported in patients who were thought to be cured.<sup>3</sup>

Controversy has arisen over the concomitant use of 5-fluorocytosine (5-FC) and amphotericin B; likewise, controversy has resulted over the infusion

## Patient survival depends on rapid diagnosis and prompt initiation of therapy.

of granulocytes in the myelosuppressed patient who is also being treated with amphotericin B.<sup>3,14,15</sup>

5-FC is an orally administered fluorinated pyrimidine which has been found, by *in vitro* testing, to alter DNA and protein synthesis in susceptible aspergillus species.<sup>3</sup> Of note is the large number of aspergillus species *not* susceptible *in vitro* to 5-FC.<sup>3</sup>

There appears to be no role for the use of 5-FC alone in treating the immunocompromised host suffering with invasive aspergillosis. Putative advantages of concomitant administration of 5-FC and amphotericin B are twofold: (1) the drugs are believed to be synergistic, and (2) damage mediated by amphotericin B to the fungal membrane facilitates the entry of 5-FC, with accordant increased fungal genetic damage.<sup>3</sup>

Although the effective dose of amphotericin B possibly can be reduced with 5-FC therapy, the myelosuppressive effects of 5-FC appear to be exacerbated by the presence of amphotericin B.<sup>3</sup> Therefore, difficult cost/benefit analysis influences the suitability of coadministration of these agents in the granulocytopenic patient.

Concurrent and sequential administration of amphotericin B and granulocyte transfusions also has proved problematic. Although the mechanisms of pulmonary injury are not clear, it appears that



leukocyte transfusion (especially in the patient with pre-existing gram-negative sepsis) may sensitize the lung tissue and potentiate pulmonary damage by amphotericin B.<sup>14</sup> The limited number of investigations into this issue have left the clinician bereft of clear guidelines. It does seem that if granulocyte transfusion in the patient receiving amphotericin B is considered, special caution and close monitoring of the pulmonary status must be employed.

Adjunctive therapy with rifampin and amphotericin B has been studied. Initial research indicates synergism between the two drugs, with predominantly excellent therapeutic outcomes.<sup>3</sup>

Nystatin aerosols and the imidazole drugs have been evaluated for the treatment of invasive aspergillosis. Neither appears at this point to have a role in the therapy of invasive disease.<sup>3</sup>

## CONCLUSIONS

Early diagnosis and treatment of invasive aspergillosis is essential for the patient's survival. Optimal responses to therapy are achieved if diagnosis is made and treatment begun within 96 hours of the appearance of a new pulmonary infiltrate.<sup>8</sup> Control of the underlying disease is likewise essential.

Invasive pulmonary aspergillosis is a disease of growing importance. As the population of immunocompromised individuals expands, it will become increasingly essential for the clinician to recognize quickly the signs and symptoms of this disease and to arrange for prompt, definitive

diagnosis. If the diagnosis is established, amphotericin B therapy should be begun immediately.

The high mortality rate of invasive aspergillosis, even with proper diagnosis and therapy, underscores the compelling need for continued research by investigators.

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# Assessment and Selection of Patients for Heart Transplantation

D.K.C. Cooper, MD; Pat Sumpter, RN; D. Novitzky, MD; J. Chaffin, MD; A. E. Greer, MD; C. N. Barnard, MD; N. Zuhdi, MD

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*Factors influencing the selection of patients are discussed. Factors which might prove adverse to a successful outcome must be assessed carefully; they may not necessarily preclude transplantation.*

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Over 1,400 heart transplants were performed worldwide during 1986; approximately 1,000 of these were carried out in North America.<sup>1</sup> The overall results show an average one-year survival of more than 80%, with a five-year survival of over 60%.<sup>1</sup> Heart transplantation, therefore, can no longer be considered a clinical experimental procedure, but has been established as a routine therapeutic intervention.

Heart transplantation has been taking place in Oklahoma since March, 1985. Between November, 1984, and May, 1987, 38 patients were assessed for heart transplantation at Baptist Medical Center, and 2 others were assessed elsewhere but fully discussed by telephone and correspondence.

The selection process at Baptist Medical Center is based on detailed assessment by a team of specialists supported by a solid hospital infrastruc-

ture. Assessment involved the taking of a full history, detailed physical examination, and performance of the relevant laboratory studies. Each patient was assessed independently by specialists in the following fields: cardiology, cardiothoracic surgery, respiratory medicine, renal medicine, gastroenterology, endocrinology, infectious diseases, psychiatry, and oral surgery, together with a social worker. When the relevant data had been compiled, all specialists concerned with the patient met to discuss his or her suitability for transplantation.

Sixteen of the 40 patients underwent transplantation (one was subsequently re-transplanted), 14 at Baptist Medical Center, and 2 elsewhere (due to insurance company regulations). (In addition, 2 patients were assessed and accepted for heart-lung transplantation, one of whom has recently been transplanted, while the other awaits a suitable donor). We present a brief review of these 40 patients, their underlying pathology, and factors which influenced decisions regarding their suitability for transplantation (Table 1).

## PATIENTS — BASIC DATA

Thirty-three patients were men, 7 women. Mean age was 48 years, with a range from 16 to 63 years. Mean age of the men was 50 years, and of the women 41 years. Twenty-six had underlying ischemic heart

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disease, 11 cardiomyopathy, and 3 other conditions (rheumatic, congenital, and endocardial fibroelastosis). Nine had undergone previous cardiac surgery.

#### **Accepted for Transplantation (Table 1).**

Twenty-one (53%) of the 40 patients fulfilled the basic criteria for transplantation, namely the presence of end-stage myocardial disease, not amenable to any other form of medical or surgical therapy, with a poor prognosis, considered as less than a 25% likelihood of survival for six months. Though the heart condition was near to terminal, the patient had no other major organ dysfunction (unless secondary to the heart failure and potentially reversible).

Of these 21 patients accepted for transplantation, 14 underwent transplantation at Baptist Medical Center and 2 elsewhere; 5 died waiting for a suitable donor. Survival of those who died before a donor became available was between two days and one month.

#### **Not Accepted for Transplantation (Table 1).**

Fifteen patients were not accepted for transplantation (38%). In four cases, the patient's cardiac status was not yet considered serious enough to warrant the procedure, other medical and surgical avenues remaining incompletely explored. One of these underwent a myocardial revascularization procedure, one tricuspid valve replacement and closure of an atrial septal defect, and the other 2 remained on medical therapy. All 4 remain alive between 2 and 22 months later.

Ten patients were considered unsuitable for transplantation due to the presence of significant adverse factors; in seven cases multiple adverse factors were present. These adverse factors included severe irreversible dysfunction of other organs (eg, cirrhosis of the liver), recent multiple pulmonary emboli, significant psychological instability (including drug or alcohol abuse) or mental illness, advanced age, and diabetes mellitus. Seven of these 10 patients have subsequently died between five days and four months later. Three remain alive two, four, and eight months later respectively, though in each case the quality of life is extremely poor.

**No Decision Made (Table 1).** In four cases (10%) no definite decision regarding transplantation was made. Two patients died suddenly while still being assessed or while treatment was being given in an effort to eradicate conditions which might have seriously jeopardized the outcome of transplantation, eg, gastrointestinal ulcers; both patients died within one month of first being presented for possible

transplantation. Two patients withdrew during assessment (one of whom had significant psychiatric problems) before any decision could be made, and both remain alive 14 and 22 months later.

## **DISCUSSION**

In this series of 40 patients submitted for assessment for transplantation, just over half were accepted; only 40% actually underwent the operation. Nearly 40% were not accepted, of whom two-thirds had adverse factors which, it was felt, contraindicated this form of therapy.

The short survival (two days to one month) of patients who were accepted to the program, yet for whom a suitable donor was not found, and of 7 of 10 patients who were rejected as being unsuitable due to the presence of adverse conditions (survival five days to four months), suggests that their cardiac condition was indeed serious enough to have warranted consideration for transplantation.

The 4 patients considered not to have heart disease severe enough to warrant the procedure remain alive between 2 and 22 months later, supporting the decisions made.

Heart transplantation has developed rapidly during the past few years, largely as a result of the introduction of the immunosuppressive agent, cyclosporine. The strict criteria for acceptance for transplantation have thus been relaxed slightly since the Baptist Medical Center program was begun, and exploration of the limits beyond which adverse factors begin to play a significant role is continuing both at our center and elsewhere.

Experience has demonstrated certain factors, however, which remain an adverse influence on the outcome after cardiac transplantation, though not all surgeons in this field agree on the degree of adversity of each factor. Clearly, each factor listed below is a relative contraindication, and the degree to which each must influence the decision regarding acceptance for transplantation will be variable.

These factors include:

- *Active infection* at the time of transplantation.
- *Renal, hepatic, or pulmonary dysfunction* not related to the underlying heart failure and not considered reversible.
- *The presence of a malignant tumor*, or the recent excision of a malignant tumor, where the long-term course of the neoplastic condition remains uncertain.
- *Recent and unresolved pulmonary infarction*, as this increases pulmonary vascular resistance and

TABLE 1. ASSESSMENT OF 40 CANDIDATES FOR CARDIAC TRANSPLANTATION  
November 1984 - May 1987

Underlying Pathology	Mean Age (yrs)	Accepted/ Not accepted	Reason for Nonacceptance	Outcome
Ischemic heart disease 26	51	Accepted 12		Transplanted 9 Died waiting 3
		Not accepted 11	Other therapy 2 Adverse factors 9	Alive 2 Alive 3 Died 6
		No decision made 3		Alive 1 Died 2
Cardiomyopathy 11	43	Accepted 8		Transplanted 7 Died waiting 1
		Not Accepted 2	Other Therapy 2	Alive 2
		No decision made 1		Alive 1
Other 3	32	Accepted 1		Died waiting 1
		Not accepted 2	Other therapy 1 Adverse factors 1	Alive 1 Died 1

may lead to early failure of the donor right ventricle, and, more importantly, may be a site for pulmonary infection.

- *Overt psychiatric illness* or a personality and behavior pattern which are considered likely to interfere with compliance to the relatively demanding discipline required after transplantation of any organ.

- *Advancing age* (greater than 55 years) was until recently considered a major adverse factor, as experience showed that such patients had an impaired capacity to withstand postoperative and immunosuppressive complications. A few centers, however, have recently published excellent results of transplantation in carefully selected patients with ages ranging from 55 to 67 years, and age has therefore been shown to be a less important contraindication. Patients over 55 years of age, however, must be assessed particularly vigorously to ensure that there are no other adverse factors which might compound that of advancing age. Clearly, each patient must be assessed individually and some impression gained of his or her "physiologic" age, which may vary considerably in relation to actual chronological age.

- *Insulin-requiring diabetes mellitus* was considered an absolute contraindication to transplantation, as the need for corticosteroid therapy made management extremely difficult. Successful immunosuppression with cyclosporine and azathioprine

alone is now possible with minimal or even no added corticosteroid therapy. Diabetes is now considered only a relative contraindication and, if the patient is deemed suitable in other respects, may not prove a barrier to accepting the patient for operation.

- *Acute severe hemodynamic compromise* at the time of transplantation if accompanied by acute failure of any other organ, eg, the kidneys; the outcome of transplantation in such patients is less favorable than in those who are hemodynamically stable. In the opinion of many surgeons, these patients benefit from a period of support given by a ventricular assist device or artificial heart, enabling organ failure to be reversed, thus rendering the patient in a better condition at the time of transplantation.

- The presence of any *other major systemic disease* which might impair rehabilitation.

- *Severe pulmonary hypertension* with a fixed pulmonary vascular resistance greater than 5 Wood units (400 dynes/sec/cm<sup>5</sup>) remains a contraindication to *orthotopic* heart transplantation, as the donor right ventricle will fail in its attempt to pump against this resistance. The patient's own right ventricle, which has hypertrophied and adapted to this high resistance, can, however, be utilized to maintain pulmonary perfusion while the donor right ventricle adapts, by performing *heterotopic* heart transplantation in such cases. If the pulmonary vascular resistance is fixed at greater than approxi-



mately 8 Wood units (640 dynes/sec/cm-5), however, or if significant right ventricular failure has already occurred, then transplantation of the heart and both lungs is generally indicated.

- Symptomatic *peripheral vascular* or *cerebrovascular disease*, which may show accelerated progression in patients on chronic corticosteroid therapy.

- *Cachexia*, because of a less favorable outcome in these patients.

- *Systemic hypertension* requiring multidrug therapy, as cyclosporine itself induces hypertension in a large proportion of patients receiving it.

The current results confirm the value of heart transplantation in providing a good quality of life in certain end-stage cardiac patients for whom no other therapy is available. Factors which might prove adverse to a successful outcome must be assessed carefully; they may not necessarily preclude transplantation.

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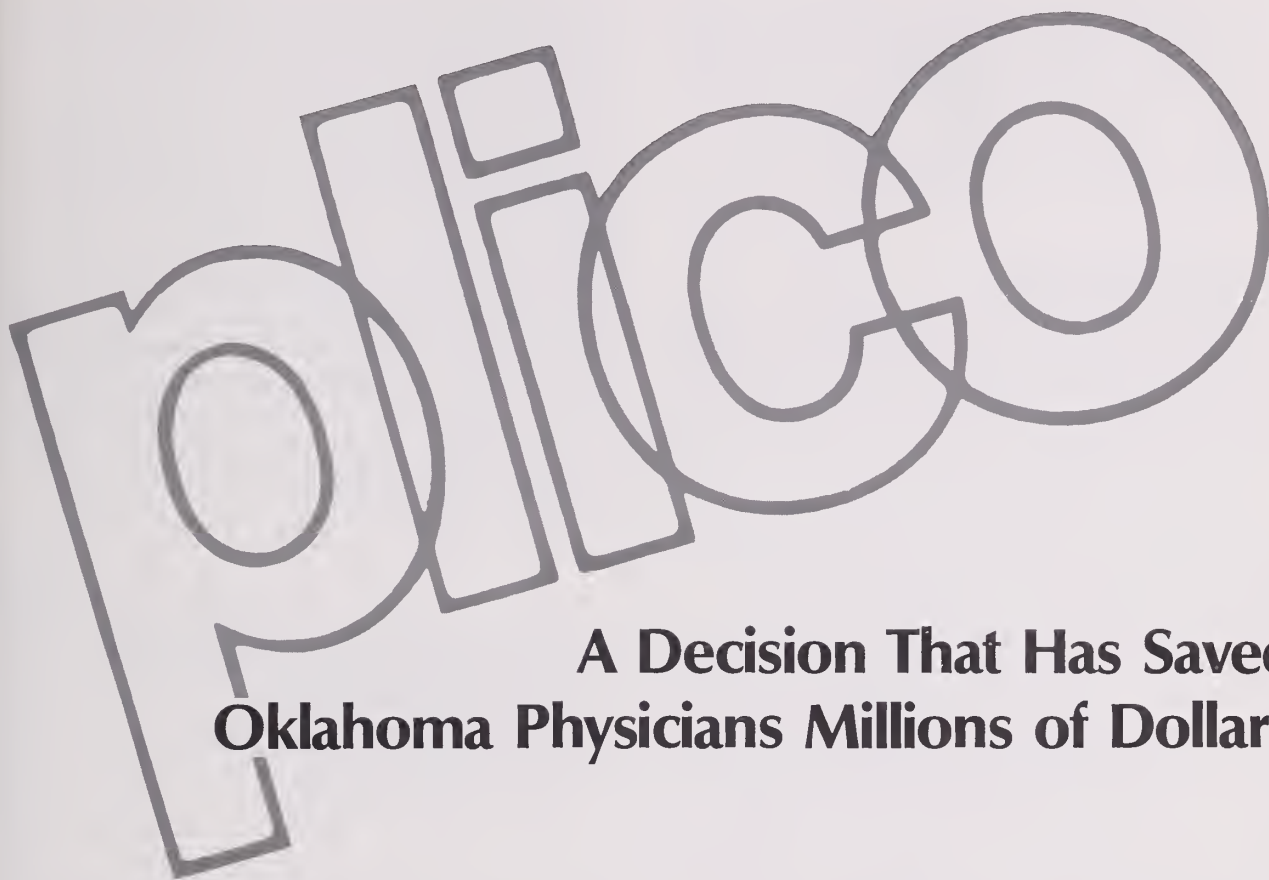
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*Pat Sumpter, RN, is the transplant coordinator at the Oklahoma Transplantation Institute. C.N. Barnard, MD, is scientist-in-residence at Baptist Medical Center. All other authors are cardiothoracic surgeons at the Oklahoma Transplantation Institute.*

## Coming in April . . .

Papers being considered for publication next month include a study of prenatal care in Oklahoma and the number of self-pay women in financial need. A case report on an atypical myofibroblastic tumor of the bladder is also under consideration.



## **A Decision That Has Saved Oklahoma Physicians Millions of Dollars**

**By Joyce Outhier**

**L**ess than a decade ago, the Oklahoma State Medical Association formed PLICO — Physicians' Liability Insurance Company — to provide the best possible liability insurance coverage for Oklahoma physicians at the lowest possible costs. To date this decision has saved its members literally millions of dollars in insurance premium payments . . . and the special advantages PLICO provides continue to grow in significance.

As PLICO enters its eighth year of service to OSMA members, this article reviews the reason for its formation and the unique aspects of its coverage that make it one of the most valuable liability insurance programs for physicians offered anywhere in the nation.

### **THE MEDICAL MALPRACTICE CRISIS**

For many physicians now in active practice, there has never been a time in their professional career when medical malpractice has not been a thorny —

and growing — issue. Other physicians remember vividly when the malpractice issue burst upon the scene in the 1960s and reached crisis proportions in many parts of the country during the early 1970s.

The issue then was lack of availability of medical malpractice coverage at any price. Within the last two years, medical malpractice has again become a "crisis" issue in many states—this time due to the rapidly escalating cost of adequate coverage and the limitations in the type of coverage available.

Throughout this period, Oklahoma physicians have been cushioned from the worst effects of the medical malpractice issue, thanks to enlightened decisions they have made through the Oklahoma State Medical Association. Through its sponsorship of malpractice insurance programs, culminating in the formation of PLICO in 1979, the OSMA has provided its members with more effective coverage at significantly lower costs than would have been available otherwise.

In fact, even before medical malpractice became

a major issue, the Oklahoma State Medical Association was a leader in anticipating and developing insurance plans, especially those designed to deal with professional liability. In 1948 it became the first medical association to sponsor a malpractice insurance program, through a major insurance carrier.

## THE EARLY YEARS

St. Paul began providing a professional liability plan to the OSMA in 1952. In those days, before the advent of today's litigious society, the premium for \$100,000/\$300,000 of liability insurance was \$67 a year, and for many years the plan went without experiencing any losses!

Then Melvin Belli pioneered the business of suing physicians in California, and his financial success prompted other attorneys to follow his example. Professional liability rates began to skyrocket in every state. Oklahoma was no exception.

The first major decision for OSMA members came in 1966, when St. Paul filed a large rate increase and also took the arbitrary position that loss experience was worse in Tulsa and higher premiums should be imposed on Tulsa physicians. The association's Council on Member Services staunchly resisted this proposition and questioned the higher rate schedule. The council requested C. L. Frates and Company to obtain quotes from other insurers. They were successful in obtaining a lower bid, with uniform premiums for all Oklahoma physicians, from Insurance Company of North America (INA).

However, with the proliferation of large jury awards in malpractice suits, INA became fearful that physicians were uninsurable risks. INA refused to provide limits in excess of \$100,000, and each year there was a battle over pricing. In 1973, higher limits had to be secured from other sources. By 1978, when The Hartford was invited to compete with INA for the OSMA malpractice account, no other insurers in the United States were willing to consider this type business.

The Hartford won the bidding in 1978, but by 1979 was requesting a 67% rate increase. This was one of many factors that prompted OSMA to form its own insurance company, Physicians' Liability Insurance Company (PLICO).

## THE PHILOSOPHY BEHIND PLICO

There were other important considerations. For one,

the association recognized the continuing atrophy in the market for malpractice insurance. It seemed apparent that Oklahoma doctors needed to control their own destiny, to make sure not only that insurance was available, but that the price was fair . . . and that physicians as individuals were underwritten by their peers and not cancelled by an insurance underwriter for reasons that were from a medical standpoint unjustifiable.

Formation of PLICO also assured physicians that the income of the company was used exclusively for the benefit of policyholders. The long span of time that elapses before malpractice losses are paid requires large reserves in the insurance company — so that investment income is a significant factor in funding these payments.

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was \$67 a year.**

A final factor in the decision to form PLICO was that the Board of Trustees was confident that the unity within the Oklahoma State Medical Association was sufficient to guarantee the high participation necessary to secure reinsurance and to keep the premiums as low as possible. This confidence has been vindicated in the years since PLICO's formation.

The philosophy adopted by PLICO upon its organization, at the direction of OSMA's Board of Trustees, included these eight crucial principles:

1. Never to pay one penny for tribute.
2. Keep the price for insurance as low as possible commensurate with security for the policyholders.
3. Meet the needs of physicians and make every effort to be flexible and fair.
4. Make sure a physician's coverage could not be terminated without a fair judgment of the individual's peers.



5. Handle claims in a way that would best protect the physician, and see that the physician retained the ultimate right to decide whether a claim should be settled or litigated.
6. Write the policy in a way that would protect the physician in all his medically related activities. *Above all, continue the occurrence form of coverage.*
7. Make sure all physicians in the association, regardless of where they live, are treated even-handedly, with no discrimination in price based on the geographic area of the state in which the physician practices.
8. The association will own the company, and doctors elected by OSMA members will always run it.

### A \$9,000,000 IMPACT

It was 1984 before PLICO's premiums reached the level that The Hartford had proposed in 1979. The savings to Oklahoma physicians during that period of time alone totaled in excess of \$9 million. These savings were accomplished because virtually every Oklahoma physician, regardless of where he or she lived in the state, participated in supporting the company through enrollment in the program and an active interest in the association.

During this same period of time, premiums in surrounding states doubled or tripled. A current comparison of insurance rates is shown in the accompanying chart.

Even more important, Oklahoma now stands alone in the United States as the only state where "occurrence" insurance coverage is obtainable.

In 1983, The General Reinsurance Company, largest reinsurer of medical malpractice in the country, refused to further reinsure occurrence-type primary carriers. Virtually all the other captive insurance companies followed the commercial carriers and opted to go to the inferior claims-made insurance policy.

PLICO, however, opted to continue occurrence coverage and found a large, reliable company willing to reinsure our occurrence policy. This was possible only because of PLICO's large archive of accurate and complete loss experience, the passage of State Bill 622-S in 1977 limiting the statute on medical malpractice claims to three years except for minors and incompetents, and because of the unity demonstrated by association members. (Since the vast

majority of Oklahoma physicians participate in PLICO, it is not discriminated against from a loss standpoint as were some of the troubled captive insurers such as Florida.)

### WHAT OCCURRENCE COVERAGE MEANS TO YOU

Why is "occurrence" coverage so much better than "claims-made" coverage? Because it offers the physician protection that continues beyond the active period of the policy.

Occurrence-based insurance holds the insurance company financially responsible for claims resulting from treatment rendered during the coverage period, regardless of when the claim is filed. This results in



a long "tail" of exposure by the insurance company to unfilled malpractice claims.

A recent national study shows that only 30% of claims are filed in the year of treatment, another 30% in the year after treatment, 25% in the third year, 7% in the fourth year, and 8% in years 5 through 10.

Insurance companies feel this long lag time makes it difficult to determine appropriate premiums and necessary reserve levels. So they prefer to issue claims-made policies, under which they are responsible only for claims filed during the coverage year, regardless of when treatment took place. However, this puts the physician at jeopardy for suits filed late and makes it necessary for doctors to carry insurance for years after retiring from active practice. This risk to the physician is heightened by the possibility that at some future time commercial insurance carriers may refuse to provide any type of malpractice insurance in their state.

There is also a hidden premium cost in claims-

**MULTISTATE PREMIUM STUDY**  
December 1987

State (Ins. Carrier)	Type Policy and Limits (Millions of \$)	Mature Premium for Class:		
		I	III	VIII
Missouri (Medical Defense Asst.)	Claims-Made (1/2)	\$5,582	\$15,069	\$55,804
Colorado (COPIC)	Claims-Made (1/2)	5,648	15,952	61,904 <sup>1</sup>
New Mexico (N.M. Phys. Mutual Liab. Co.)	Claims-Made (1/2)	3,155	4,996	25,662 <sup>2</sup>
New York (Med. Liab. Mutual Ins. Co.) <sup>3</sup>	Claims-Made (1/3)	8,266	28,490	94,113
Kansas <sup>4</sup> (Medical Protective Co.)	Claims-Made (1/3)	3,120	7,800	28,078
Oklahoma (PLICO)	Occurrence (1/1)	1,839	3,910	11,963

1. Class VI A rather than VIII.  
2. Class X rather than VIII.  
3. All rates shown are the high rates.  
4. The basic policy limit written by all insurance companies in Kansas is \$200,000/\$600,000. Physicians then pay into a fund with limits X \$200,000/\$600,000 to \$1,000,000/\$3,000,000 for 90% of base premium.

made coverage during the first year of a switchover from occurrence-type coverage, or for a physician newly entering practice. Typically, insurance carriers offer reduced premiums in the early years of the policy when there is less exposure to claims (due to occurrence coverage or the fact that the physician was not actively in practice), with the premium increasing yearly until it reaches a "mature premium cost" level. This "mature premium cost" plus the cost of the "tail" or "extended reporting endorsement" is the figure to use in comparing the actual cost of claims-made insurance to occurrence-type insurance coverage. Frequently it is impossible to purchase enough extended reporting privilege to make a claims made policy the equivalent of an occurrence policy.

## THE CURRENT COST PICTURE

PLICO is the last occurrence insurer of medical malpractice, with the broadest policy and lowest pricing available anywhere in the United States . . . but the price has still risen steadily. Premiums have increased almost 300% since the company was formed, even though every penny of income is plowed back into the company to pay expenses and losses. This is despite the fact that PLICO's overhead is less than one-third that of commercial insurers. Costs

still continue to rise steadily, driven by the litigiousness of our society and an increasingly liberalized torts law.

However, ownership of PLICO by the association has been a powerful alliance in efforts to obtain tort reform. Because the true loss experience for medical malpractice has been available on a timely and accurate basis, the association's task force has been able to tell the state legislature the truth about medical malpractice and the distressing loss picture that has developed elsewhere. They were also able to provide up-to-date information on rising premium costs which in turn lend themselves to higher medical costs and more limited availability of medical services for all citizens of Oklahoma.

PLICO has been forced not only to raise its premium rates over the years, but also to utilize an assessment of OSMA members. The purpose of this assessment was two-fold: first and foremost, to fund the tort reform effort, and secondly to augment PLICO's surplus so less reinsurance would be needed, thus reducing reinsurance premium costs. This in turn will help PLICO's efforts to keep its premiums at lower levels in future years.

The assessment device was used because an association assessment and a direct contribution to surplus and capital meant significant tax advantages to both the physicians and PLICO.

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## ACCIDENT AND HEALTH INSURANCE

In 1983, PLICO expanded its horizons to help physicians in another area: creating a stable and dependable accident and health insurance program.

The plan was set up when commercial insurers complained that physicians and their employees were a bad risk and that rates needed to be escalated to what then appeared to be astronomical levels.

PLICO responded by making insurance possible for all Oklahoma physicians, even those who were physically impaired and unable to purchase insurance elsewhere. The PLICO Group Health Insurance Plan grew much more swiftly than anyone had anticipated — proving the need was even greater than the Board of Trustees had thought. Soon, virtually every physician's office in the state was an insured, and over 10,000 employees were insureds as well.

A number of new pressures have developed in Oklahoma's health insurance market over the past five years. The advent of PPOs and HMOs, and their initial willingness to underprice their product, dramatically increased competitive pressures on premium rates. At the same time, PLICO and other large group insurance carriers found themselves bearing the brunt of losses in families where one spouse had lost his or her job and group insurance. In this climate only PLICO and a handful of major insurers were willing to compete with the HMOs and PPOs in the marketplace.

In recent months, other major insurers, as well as the HMOs and PPOs, have dramatically increased their rates. PLICO Health also recently had its first rate increase in 36 months — an increase designed only to allow the company to operate on a breakeven basis.

Like PLICO's malpractice insurance, the accident and health program is priced to protect the security of the association and each insured, at what the trustees believe to be actual cost. That cost will always be lower as long as the Oklahoma State



Medical Association remains strong and the level of participation in these programs is high.

Without the strength generated by the unity OSMA has demonstrated through the years, and without the high level of participation in these insurance programs, malpractice insurance might well be unavailable in Oklahoma at any price — and accident and health insurance could easily cost a third again what it now costs through PLICO. □

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Story by Richard Green  
Photographs by Jim Thomas

Leaders in Medicine

# John W. Records, MD

**I**t has been demonstrated statistically that two of the most influential factors in deciding to become a physician are beyond one's own control. One is being related to a physician and the other is the premature death of a relative.

John Williams Records qualified on both counts, but both exposures were indirect because the two relatives had died before he was born in 1911.

Throughout his childhood, Jack had heard stories about the life and times of his grandfather, Benjamin Franklin Records, a doctor who had practiced in and around Kansas City, Mo., until his death in 1899. Jack was fascinated by the tales spun by his father, Claude Records.

Not only had his grandfather obviously had a romantic career —

once he had patched up a member of an outlaw gang — he also was universally admired and respected by the community.

Though Claude apparently had revered his father, he wasn't inclined toward medicine himself. He had dropped out of high school to prospect for gold in Colorado.

Later, with neither gold nor money, he returned to Kansas City, got a job with the post office, and married his childhood sweetheart, Mabelle Covey. Their first child, Frances, was born in 1902.

Four years later, Claude Jr. was born. But when the baby was only a year old, he developed an intestinal infection and died. Their baby's death was so traumatic that the family couldn't continue to live in a house so suddenly filled with such sadness. In fact, Claude quit his job and moved the family to North Dakota. And, while Jack wouldn't be born for another four years, the story of his brother's death probably had a subtle, yet profound, psychological influence on him.

The Records family returned to Kansas City in 1910, and a year later Jack was born. Though Claude was a salesman whose job required a fair amount of travel-

ing, and despite the considerable age difference between Frances and Jack, the family was very close.

Even though he lived in Kansas City, Jack's childhood desire was to be a farmer. Most of the family's relatives in the area were farmers and some of Jack's uncles were good role models. However, one especially embarrassing incident involving some runaway mules emphasized to Jack that while he might love the country, he was not of the country.

"I was spending the summer on cousin David Dillingham's 900-acre corn farm near Parsons, Kansas," Jack remembers. "I had these mules hooked up to a cultivator that I was maneuvering between the rows of corn when they began running toward a hedgerow. I tried to set the plow deeper into the soil but inadvertently raised it, turning the cultivator into a chariot. As the hedgerow loomed, I bailed out of the seat and the mules abruptly stopped."

The memory of the ignominy



ous moment, hurling himself from the cultivator when all real farmers know that mules are too intelligent to run through a hedgerow, was more painful than cousin David Dillingham's tongue-lashing about the mishap with the mules. The next time Jack talked to his mother, he said he probably wouldn't be going into farming.

After that summer, Jack's academic performance improved markedly. He began talking about becoming a doctor. Though this may have been inspired largely by a desire to win his father's approval, Jack was enjoying his science courses and tending to a small menagerie of animals.

In 1927, when Jack was 16 years old, his father contracted typhoid from contaminated drinking water and developed a massive infection following the rupture of an intestinal typhoid ulcer. He died at the age of 48. One of their last talks was about Jack's desire to become a doctor. Remembering how Dr Records had written prescriptions in Latin, Jack's father told him to learn plenty of Latin.

As it turned out, Jack did learn lots of Latin. He also had lots of jobs. Beginning when he was about 10 years old, he had sold eggs, been a paperboy, bell hop, elevator boy, soda jerk, and shoe salesman. When he was graduated from high school in 1928, he knew he would have to work his way through college and medical school. That didn't bother him, but the Roaring Twenties were about to give way to the Great Depression.

\* \* \*



*Jack Records, 8 years old, poses for a newspaper photographer in his Kansas City, Mo., neighborhood. Two years later he was delivering newspapers along the same street.*

A prospective doctor's first hurdle in those days was the undergraduate course in comparative anatomy. It was common knowledge that this was the unofficial "weed 'em out" course. It featured dissection of the mud puppy and the cat. Jack enjoyed this first taste of being a medical student. For him this came at Kansas City Junior College, where he completed his first college year.

Near the end of that year, he found he could get a job at the telephone company in Columbia, Mo. This was an answered prayer because he had been wanting to attend the University of Missouri and until then couldn't see a way.

His entry level position at the phone company was stripping nubs off telephone poles with a two-handled knife. Then, when school started that fall, he was graduated to an inside job monitoring the company's new switching system. Since he worked from 4 PM to midnight, he didn't have much social life, but he did join Sigma Nu fraternity and lived in the fraternity house.

During his junior year at Missouri he added another job, one with practical value for a pre-med student. As a student assistant in the bacteriology department, Jack did a variety of menial chores but also learned something about handling bacterial culture preparations. In the same department he served as student grader for a popular course in preventive medicine in the liberal arts college.

The following year, in 1931, he applied and was accepted as one of 40 students at the university's two-year medical school in Columbia. Though he had been elected president of his fraternity, he moved out of the house for a live-in job at the Boone County hospital, which turned out to be nicely complementary to his coursework in the basic sciences.

The job included a variety of duties that familiarized him with the workings of a hospital. He functioned as an orderly, lab technician, emergency and operating room assistant, and on occasion, janitor.

Unlike other medical schools of the time, Missouri's had a very low level of student attrition. Jack remembers only one classmate who didn't pass that first year. "He had flunked anatomy," Jack recalls. "And this so enraged his father, an osteopath, that he came



Jack was 11 years old when he played a starring role in one of Walt Disney's earliest films, *Tommy Tucker's Tooth*. The film was made in Kansas City in 1922, before Disney moved to California.

to Columbia and beat up the anatomy prof."

To some of the classmates, this thrashing seemed a just reward for an autocrat who fashioned a class of verbal regurgitators. Nevertheless, more than 50 years after he learned a ribald jingle to help him remember the names of the 12 cranial nerves, Jack can still use the jingle to remember most of the names.

Jack spent the little free time he had with Eleanor Jeffrey, a UM student from St. Louis. From their first date, they were mutually attracted, and when Jack announced his intention to become a doctor, Eleanor thought that was fine.

One day, Eleanor was late for a date with Jack because her home nursing class had run long. She told Jack they had been watching a film about dental hygiene. The movie featured some animated cartoon characters, a dentist, and some little boys, and she told Jack that she had the feeling she had seen one of them before.

She had. And she was talking to him now, he said. In 1922, when Jack was 11, a local dentist had contracted with a young Kansas City filmmaker to produce a short instructional film on dental hygiene. The filmmaker, only 21 years old, had a small company producing animated cartoons which were used as commercials in movie theaters. He had not



been paid for his productions; in fact, he was so broke that he had to borrow \$1.50 from the dentist to redeem his only pair of shoes from the shoemaker.

In any case, Jack was selected to appear in the film, entitled *Tommy Tucker's Tooth*. The filmmaker had invited Jack and the others to his office, located over a drugstore downtown, to show them how the animation was done, and he gave them each \$10 for their work. Shortly thereafter,

the filmmaker emigrated to California to produce animated films—starting with a little character named Mickey Mouse.

Many years later, to the delight of Jack and his family, he would acquire a copy of the Walt Disney film from the Disney Studios, who had obtained it from the American Dental Association.

Jack and Eleanor were married in February 1933 in St. Louis where, for his second year of

medical school, Jack had transferred to Washington University. They were still locked in the Great Depression and were lucky to have any jobs. Jack had a small tuition loan and two jobs during his second year of medical school, and Eleanor had a full-time job. Even

bankroll enough to pay for tuition.

They returned to St. Louis in 1934, and their first child, George, was born the same year.

Having been away for twelve months, Jack relished his first clinical year in school. He enjoyed pediatrics because he liked

Hospital, Jack was selected to spend most of his senior year assisting on the chest surgery service of Dr Evarts Graham at Barnes Hospital, Washington University. Because Graham was known as the world's first and foremost thoracic surgeon, the service was extraordinarily busy.

Records admitted the patients headed for chest surgery, did the histories, physicals, and all lab work, and recommended additional tests if necessary. Though he said he "wouldn't have missed this opportunity for anything," he sometimes "didn't see daylight for up to three weeks." During these intervals, his father-in-law would bring Eleanor and George to the hospital for visits.

Following his graduation in 1936, Jack spent his internship and two-year obstetrics-gynecology residency at another Washington University-affiliated hospital, St. Luke's.

Jack considered the medical service at St. Luke's a model for how he thought medicine should be practiced. "All the physicians were on the medical school's faculty and there was a closeness among them that enabled ready access to other specialists as needed," he says.

In the last year of his residency, he visited the Oklahoma City Clinic and saw this ideal version of medicine being practiced there. When the clinic doctors invited him to join as their obstetrician-gynecologist, he didn't have to think twice. He started in July 1939.

He was the clinic's eighth physician. It had been founded in 1919 by Dr William Rucks and now included his son, Dr Bill Rucks, Jr, and two other Vanderbilt graduates, pediatrician Dr Ben Nichol-

## Keenly aware of the medically underserved, Jack Records was instrumental in establishing the OSMA Maternal Mortality Committee.

so, their combined weekly income was only about \$15, and by the end of the second semester they were "about out of funds and sources of funds."

Jack ran into a friend who said he was doing pretty well selling yellow page ads for the phone company. Jack inquired and was hired to work out of Fort Worth, Texas. He felt he had no choice but to drop out of medical school for a year; characteristically looking on the bright side, he told Eleanor they would spend a year-long honeymoon in the Lone Star State.

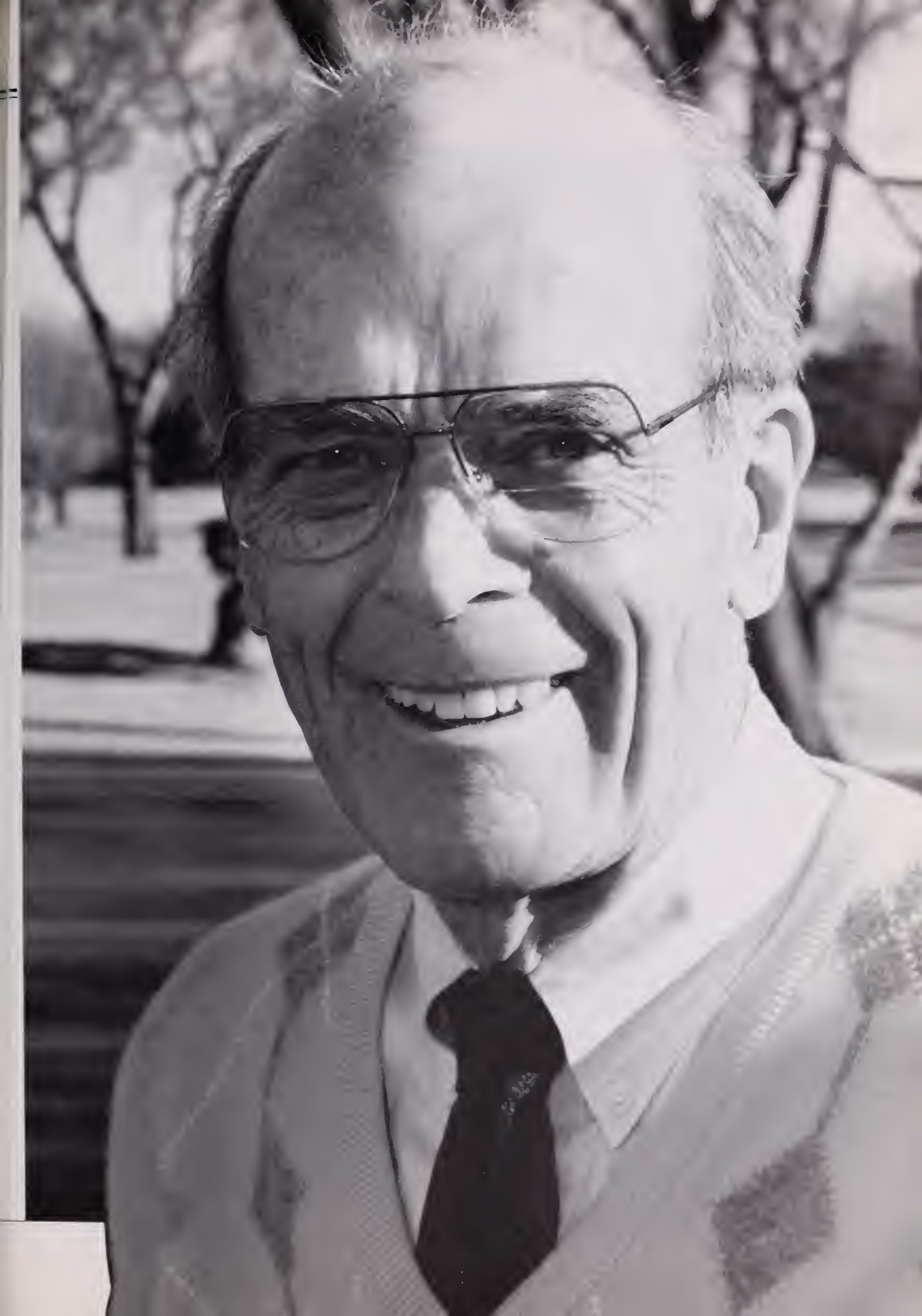
They lived in such festive spots as Fort Worth, San Angelo, Waco, and Wichita Falls. Since Bell had recently taken over the telephone companies in those towns and immediately raised the rates, Jack was not always warmly greeted by potential customers. There were times when the money ran out, and Jack wondered if this "honeymoon" had been a big mistake. Nevertheless, he made enough money through his commissions to keep up the payments on a Chevrolet and

children and because he was witnessing the dramatic impact of some recent medical innovations. One was developed by one of his professors and called Hartmann's solution, a parenteral fluid chemically compatible with body fluids for use in treating acidosis and alkalosis. This was critical for the legions of hospitalized children who were starving or suffering from infantile diarrhea.

Also during his junior year, Jack's exposure to several excellent and inspirational teachers in obstetrics and gynecology turned his head. Especially influential was a virtually unique course (for the time) on OB-GYN pathology, including a basic understanding of not only common diseases but also the pathology of pregnancy and of the placenta. He also had his first practical OB experience in delivering babies at St. Louis Maternity Hospital and in homes.

Because of his prior practical experience at Boone County









In 1943, at Carlisle Barracks, Pa., US Army medical doctors learn military essentials such as map reading and the basics of supply and transportation. Major Records was one of their instructors.



son, for whom one of the towers is named at Oklahoma Children's Memorial Hospital, and Dr Austin Bell, general and thoracic surgeon, from Kentucky. Of the three, Austin Bell was the one who influenced Jack most in his decision to come to Oklahoma.

"It was a wonderful opportunity," Records says. "Unlike most of my classmates, I was practicing my specialty right away, and at the clinic I had at least some patients every day. What I didn't know then was that over half of the babies born in Oklahoma were delivered at home, and I didn't intend to do home deliveries."

He was appointed to the volunteer faculty at the University of Oklahoma medical school and spent two days a week in the outpatient department at University Hospital. He also took nighttime call with the residents and helped deliver babies of unwed mothers at University and Deaconess hospitals.

After just a year and a half in

Oklahoma City, however, Records was ordered to active military duty. He had been a reserve officer since 1936. Now 1st Lt. Records was bound for the Medical Field Service School, Carlisle Barracks, Pa., for a "refresher course" of a month, and then to Fort Bliss, near El Paso, Texas.

\* \* \*

He soon learned that his military duties would involve little doctoring.

Instead, he was a training officer for a thousand-bed general (field) hospital in the making, which would support a large battle force should the US enter the War.

During early 1941, Records thought that chance was remote. His orders read that he would serve one year and return to his home in December 1941. And since Eleanor and George were with him in Texas, he was happy in his work.

As the year wore on and US

involvement in the war seemed more likely, he and the others developed more *esprit de corps* and an urgency about their work.

After December 7, 1941, rumors were rife about where his unit would be assigned. When bales of mosquito netting arrived, everyone was sure they were headed for the tropics. Just before Christmas, the unit was confined to the post and ordered to prepare for an overseas departure. They spent the next few weeks practicing loading and unloading their equipment on rail cars.

Three weeks later, Eleanor saw Jack's permanent orders before he did; they were printed in the El Paso newspaper. She called the post to tell him he was being assigned to Carlisle Barracks, Pennsylvania. Since he had already been there as a student, he knew it was a large training center for medical officers being trained in the military aspects of providing medical care in combat.

"This was a great shock,"

Records says. "It meant I wouldn't be going overseas with my unit. I tried to get the orders changed on the basis that I was important to the unit. I got the letter countersigned by my commanding officer . . . but there was no reply.

**"T**he orders to Carlisle in January 1942 included my family and were a permanent change of station. We were assigned quarters on the post. Eleanor, George, now seven, and I moved into the house formerly occupied by Pop Warner when he coached the Carlisle Indians." George learned to ice skate on a pond near their house.

Again, Records' assignment involved no medical practice. He was a teacher in the department of logistics, and taught the basics of supply and transportation to doctors prior to their field assignments. The courses took from four to six weeks and involved from 50 to 1,000 trainees per class. His lectures included such subjects as principles of the internal combustion engine, movement of medical supplies, and preparation for overseas movement.

At first, he thought his stage fright was leading to ulcers, but at some imperceptible point, the nervousness eventually gave way to monotony. Still, he wasn't unhappy, recalling, "I was so busy and had so much responsibility on the job that I didn't have time to sit around and fret."

Once, partially to relieve the tedium, he requested and was granted leave for one week to attend a course in caudal analgesia at the University of Pennsylvania, Philadelphia. Also during his Carlisle tour, Jack was

graduated from a two-month course at the Command and General Staff School, Fort Leavenworth, Kansas.

During their tour of duty at Carlisle, Eleanor and Jack added to their family. Susan was born in 1943 and Nancy in 1944. With George now 10, the old Pop Warner quarters became a busy and happy home.

After almost four years at Carlisle, Records, desperately wanting to practice medicine, requested an assignment to a general field hospital or a MASH unit. "Someone must have felt sorry for me," Records observes, "because I got an offer to train in neurosurgery at Walter Reed Hospital in Washington."

The Army was short of neurosurgeons, so the military was training doctors to repair peripheral nerves damaged by gunshots and shrapnel. Dr

Records spent almost three months operating or assisting three neurosurgeons at Walter Reed from morning to night. Then he spent the rest of the war operating in a large military hospital near Atlanta. He loved the work and would have considered changing his specialty to neurosurgery except for the forbidding fact that this family man would have had to complete a four-year residency.

Major Records was discharged in October 1945 and was back practicing OB-GYN at the Oklahoma City Clinic less than a month later. And though the size of the clinic had remained static during the war, all the partners realized that the practice of post-war medicine was going to be a lot different.

\* \* \*



*Jack still attends many of the OB-GYN departmental conferences at OUHSC, this one directed by Associate Professor Gary R. Thurnau, MD.*



**B**y 1947, Records was board certified in OB-GYN and the clinic had a new wing and a few more doctors. The partners had no master plan; at that time expansion was based on satisfying the patients' immediate needs. So the clinic grew gradually over the next 20 years. And it was 1978, three more decades, before the clinic moved from the original building at NW 12th and Harvey to its present location adjacent to Presbyterian Hospital and the University of Oklahoma Health Sciences Center.

After Records was board certified and felt like his practice was under control, he became actively interested in medical politics to work against "Harry Truman's program for socialized medicine. I never met a doctor in Oklahoma who favored socialized medicine."

Still, Records was keenly aware of the medically underserved. He treated many of them in the clinics of University Hospital or in Planned Parenthood's medical clinic. Many were women who received no prenatal care before delivering, and a high percentage of their babies either didn't survive infancy or had a variety of subtle to profound birth defects.

He also assisted Dr E. N. Smith on a maternal mortality study for the state health department. They and others worked to identify preventable mortality factors, and when their first report was published years later, they noted that the mortality rate had decreased because of medical advances and increased public education and awareness. The report didn't mention that the success of the latter factor was due in part to the efforts of the study

team. Jack was instrumental in establishing this group as an official committee of the Oklahoma State Medical Association, and its work continues.

As the years went by, and medicine increased life expectancy and medical costs continued

**Jack  
"has the best  
combination of  
qualities and  
characteristics  
I've ever seen in  
a physician."**

—W. W. Rucks, Jr., MD

to rise, a new group of underserved emerged: the elderly. When Medicare was proposed in the early 1960s, Records thought that doctors should join the government in making Medicare the best program possible.

"I thought Medicare was inevitable because somebody has to pay the bills," Records says. "I knew this because I had been part owner of a hospital and witnessed firsthand how medical costs were starting to go through the roof." (The partners who owned Oklahoma City Clinic also owned the 150-bed Wesley Hospital until the early 1960s, when it was sold and became Presbyterian Hospital.)

Most of Records' private

practice after the war was obstetrical, which he enjoyed more than gynecology because of the babies and the happiness their arrival brought to the parents. And this enjoyment wasn't always vicarious. Jack and Eleanor had two more children: Ellen was born in 1949 and John in 1951.

Maintaining his association with OU's medical school continued to help keep him up to date, which was important in obstetrics, a specialty experiencing major changes. "For years, we told expectant mothers not to gain weight; then we found this advice was actually detrimental."

The methods and style of labor and delivery also were changing. "I remember my first patient who wanted natural childbirth, absolutely no anesthesia. This was in the late fifties, and she was a professor of nursing. Everything went fine and the delivery was normal, but her uterus contracted before the placenta could be delivered. Since this was before the advent of drugs to relax the uterus, we had to put her out and by that time, believe me, she was more than ready for it."

Though the Oklahoma City Clinic had always recruited and employed well-trained board certified physicians, the business end was suffering by the early 1970s. Several newly hired physicians said the clinic's business practices were anti-

*Whether golfing, strolling, or admiring the view from his back window, Jack enjoys the fairways behind his home. Here he carries his St. Andrews putter, retirement gift from his colleagues at the Oklahoma City Clinic.*





quoted and began calling for administrative changes.

While the older, established doctors agreed generally, there was no consensus at the clinic about what should be done. Except for one thing: ask Jack Records to become the clinic's president.

Overtures to this effect had been made before, but Records had discouraged them, says Dr Ed Munnell, a cardiovascular surgeon who practiced at the clinic for many years. But in 1974, Records accepted the job out of a sense of noblesse oblige.

And according to Munnell, who recently retired and is writing a history of the clinic, Records' accomplishments enabled the clinic to emerge from financial turmoil so a loan could be secured to build the new clinic in 1978.

Once the clinic passed through its transitional phase successfully, Records happily relinquished the leadership. But as Munnell says,

Records' influence continued to be felt and his counsel was especially valued by Wayne Coventon, the clinic's administrator, whom Records recruited in 1975.

Jack Records continued to practice at the Oklahoma City Clinic until July 1986. He had survived all of his former partners and during the last years, had been practicing with some physicians who were the age of his first grandson, Jeff Records.

He retired as undramatically and gracefully as he had practiced. And he did so in good health.

For the last 20 years, he and Eleanor have lived in a home bordering a golf course fairway. Jack enjoys regular foursomes with old friends and plays as often as three times a week.

Conveniently, some of the couple's children live in Oklahoma City and some live in nice places to visit, like Boulder, Colorado, and Portland, Oregon.

Jack still attends many of the Tuesday morning OB-GYN departmental conferences at the OU Health Sciences Center

because he enjoys the contact with "all the bright young minds. They still keep me on my toes."

Of course, Records doesn't mention that these contacts are mutually beneficial; "the bright young minds" are exposed to a role model, who in the words of the late Bill Rucks, "has the best combination of qualities and characteristics I've ever seen in a physician."

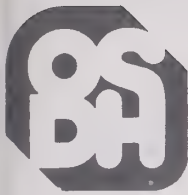
Many of Jack Records' students share that opinion. Recently, several of them living in Oklahoma contributed to a fund established in his name at the Oklahoma City Community Foundation. Planned Parenthood established the fund to honor his many years of dedicated service in its medical program. It is fitting that the fund's annual income will continue to support the service that he used to provide. □

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*Richard Green is editor of Vital Signs, magazine of the University of Oklahoma Health Sciences Center and OU College of Medicine Alumni Association.*

*Jim Thomas is a staff photographer for Vital Signs.*





News from  
the Oklahoma State  
Department of Health

## Home Injury Prevention Program for Oklahomans (HIPPO)

Each year, approximately 21 million people in the United States are injured in home accidents and about 25,000 are killed. Approximately 3,000 children under 14 years of age die as a result of home accidents each year. To help educate Oklahomans about home safety precautions, the Oklahoma State Department of Health has developed the Home Injury Prevention Program for Oklahomans (HIPPO).

The program is aimed at teaching Oklahomans basic home safety principles so they can identify and correct potential hazards. Persons will be encouraged to adopt preventive home safety behaviors.

Accidents may be unintentional and unexpected,

but few happen by pure luck or chance. Some accidents happen because of product failure. Others happen because of unfavorable environmental conditions and because people make mistakes. But environmental conditions can be improved, and mistakes can be prevented — accident-related human behavior can be changed. Changing such behavior is the goal of HIPPO.

Each month, the state health department will distribute fact sheets which discuss a specific aspect of home safety. The fact sheets will feature "the HIPPOs," a hippopotamus family from the fictional town of "Lake Safe-at-Home, Okla." In each fact sheet, the HIPPOs will highlight a particular area of home safety with prevention tips for each age group. The fact sheets will also include basic first aid techniques for injuries.

The fact sheets will be distributed to county health departments, head start programs, day care centers, senior citizens' centers, and the news media. Physicians may also find them useful in their waiting rooms or on office bulletin boards. If you would like to be placed on the distribution list, contact the Health Education and Information Service, 405/271-5601, or write HEIS, PO Box 53551, Oklahoma City, OK 73152.



DISEASE	December 1987	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	8	9	12
CAMPYLOBACTER INFECTIONS	9	241	258	—
ENCEPHALITIS, INFECTIOUS	4	28	22	31
GIARDIA INFECTIONS	11	198	243	—
GONORRHEA (Use ODH Form 228)	694	9657	12572	13983
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	38	207	247	—
HEPATITIS A	45	314	342	599
HEPATITIS B	17	236	216	277
HEPATITIS, NON-A NON-B	7	49	61	—
HEPATITIS UNSPECIFIED	3	37	48	158
MEASLES (RUBEOLA)	0	4	39	16
MENINGITIS, ASEPTIC	5	155	150	203
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	4	35	83	70
MENINGOCOCCAL INFECTIONS	11	34	32	34
PERTUSSIS	10	170	130	190
RABIES (Animal)	1	35	62	115
ROCKY MOUNTAIN SPOTTED FEVER	1	84	102	124
RUBELLA	1	6	0	1
SALMONELLA INFECTIONS	24	446	475	492
SHIGELLA INFECTIONS	7	153	223	294
SYPHILIS (Use ODH Form 228)	22	187	167	200
TETANUS	0	1	1	1
TUBERCULOSIS	21	237	254	275
TULAREMIA	0	26	13	25
TYPHOID FEVER	0	1	0	3

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	117
BRUCELLOSIS	5
LEGIONNAIRES DISEASE	28
MALARIA	5
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	19



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# Human Retroviruses and AIDS

Ronald O. Gilcher, MD

This article is the first of a series of short papers concerning the issue of the Human Immunodeficiency Virus (HIV) and/or Acquired Immune Deficiency Syndrome (AIDS) to be published monthly in the OSMA JOURNAL. Each article will address a different aspect of AIDS/HIV infections and each article will be written by a different member of the OSMA's Ad Hoc Committee on AIDS or another expert in this field. The purpose of these articles is to provide a brief and timely review on different aspects of HIV/AIDS in order to help Oklahoma physicians stay abreast of the latest developments concerning HIV/AIDS. The first article, by Ronald O. Gilcher, MD, focuses on the presently known human retroviruses and the relationship of the AIDS viruses (HIV-1 and HIV-2) to them.

## *OSMA Ad Hoc Committee on AIDS:*

<i>Ronald O. Gilcher, MD</i>	<i>Lloyd A. Owens, MD</i>
<i>Jeff Beal, MD</i>	<i>George Prothro, MD</i>
<i>Jay P. Cannon, MD</i>	<i>Philip J. Rettig, MD</i>
<i>Donald Cooper, MD</i>	<i>Eric Westerman, MD</i>
<i>Jodie L. Edge, MD</i>	
<i>Douglas Fine, MD</i>	
<i>James D. Funnell, MD</i>	
<i>Greg Istre, MD</i>	
<i>Jennifer Johnson, MD</i>	

Although animal retroviruses have been known to exist for many years, it was not until 1978 that Gallo and his coworkers identified the first human retrovirus and called it HTLV-I (human T-cell lymphotropic virus, group I). This retrovirus, when it infects a human being, can result in a subclinical latent carrier state with no apparent ill effects. At some later point in time (possibly years later) the infected individual may develop a rapidly fatal form of leukemia/lymphoma called "adult T-cell leukemia" (ATL) or may develop a neurologic syndrome called tropical spastic paraparesis (TSP) and mistakenly be diagnosed as multiple sclerosis. Although HTLV-I is relatively "new" to the medical profession, it has probably infected humans for a few hundred years.

The second human retrovirus, discovered shortly after HTLV-I, is appropriately called HTLV-II and has been linked to "hairy cell leukemia," although not yet proven to be the causative agent.

The third human retrovirus discovered and identified through the work of Gallo at the National Cancer Institute in Bethesda, Md, and Montagnier at the Pasteur Institute in Paris, France, turned out to be the causative agent of AIDS. This virus, initially called HTLV-III in the USA and LAV (lymphadenopathy associated virus) in France is now officially called HIV-1 (human immunodeficiency virus-group I). Interestingly, this virus, when it infects a human being, can produce a subclinical latent carrier state with no apparent ill effects. Just as with HTLV-I, at some later point in time (possibly years later) the infected individual may develop a

T-cell immunodeficiency syndrome with increasing susceptibility to a variety of infectious agents (bacteria, other viruses, fungi, and parasites) or malignancies (Kaposi's sarcoma and primary lymphoma of the brain) which ultimately result in the death of the individual. Curiously, just as with HTLV-I, HIV-1 can infect the central nervous system macrophages and result in a neurologic syndrome characterized by diverse neurologic symptoms from dementia to paresis and paralysis.

The discovery of HTLV-IV, now called HIV-2, led medical scientists to realize there are at least two human retroviruses that can result in AIDS.

Now the recent discovery of a fifth human retrovirus (HTLV-V) linked to mycosis fungoides (a T-cell lymphoma) makes us realize that this is only the beginning of a new era of infectious agents in humans which are of critical importance because they are all incurable, they are all spread in the same manner (viz blood or intimate sex), it is difficult to

produce effective vaccines from them, and their spread can only be stopped by effective communication and education of the world's population. We are, so to speak, in the midst of a "global retroviral pandemic." This term was coined by Gallo at the third international conference on AIDS in Washington, DC, in June 1987 to make all of us realize the importance, not only of the global AIDS epidemic but of the global spread and the importance of all the human retroviruses. □

#### Bibliography (Suggested Reading)

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Omissions and mistakes

*HIV testing, counseling fall short of the mark*

A recent study in Minnesota suggests that in the absence of strict guidelines, testing for the virus that causes AIDS is often done inappropriately and without patient consent or counseling.

The study, conducted by Keith Henry, MD, and colleagues at St. Paul–Ramsey Medical Center, St. Paul, Minn, the University of Minnesota Medical School, Minneapolis, and the St. Paul Division of Public Health, involved patients tested for antibodies to human immunodeficiency virus (HIV) at a major medical center in Minnesota between April 1985 and August 1986.

After reviewing the charts of 264 such patients, the authors concluded that only 10% of the tests were appropriately performed. They found documentation in only 9% of the charts that the test was discussed with the patient and that he or she received counseling on reducing the risk of contracting or spreading HIV. Only 3% of the charts contained a patient-signed consent.

Forty-four percent of the patients tested had no recognized risk factor for HIV infection recorded in their charts. In addition, the authors found evidence that some physicians had misused the tests or had drawn false conclusions from the results. Eleven charts showed no indication of why the tests were ordered or who ordered them. In six cases, a positive enzyme-linked immunoabsorbent serology result was incorrectly interpreted by physicians as evidence of HIV infection, despite a negative finding from Western blot analysis. In five others, asymptomatic HIV-positive patients were incorrectly recorded as having AIDS.

The authors conclude that the education of health care providers about HIV testing alone without enforced guidelines may be insufficient to prevent inappropriate use of HIV tests. In lieu of enforced guidelines — as adopted by some institutions and by

some states — the authors recommend that both the reason for ordering HIV tests and the patient's consent need to be clearly documented in the patient's chart.

They also recommend that health care workers be further educated about the appropriate uses of HIV testing and how they can perform a valuable public health service as well as medical service by the optimal use of these tests. "Hospitals should develop policies whereby HIV antibody testing is obtained with patient consent and in conjunction with risk-reduction counseling," they say. "Coupling testing with consent and counseling avoids complex ethical and legal questions and may enhance the value of either a positive or a negative test result."

In an accompanying commentary, Renslow Sherer, MD, of Cook County Hospital, Chicago, raises questions about the harm that can result from improper HIV testing, from misinterpretation of test results, from failure to protect patient confidentiality, and from failure to provide counseling.

"In light of these risks, physicians have a profound responsibility to educate themselves about the meaning, appropriate use, and potential adverse consequences of the HIV-antibody test before

(continued)

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## CALL FOR RESOLUTIONS

All resolutions to be presented to the Oklahoma State Medical Association House of Delegates Annual Meeting must be received in the executive offices no later than thirty (30) days prior to the meeting. This year's meeting will be held May 5-7, 1988, at Shangri-La Resort, Afton, Oklahoma.

County medical societies or individuals wishing to submit resolutions should mail them to OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118. Should you need assistance in drafting such resolutions, please contact the executive offices.

SUBMIT YOUR RESOLUTIONS  
ON OR BEFORE APRIL 6, 1988

*Former OSMA treasurer*

## Correctional health care group recognizes Start's achievements

Armond H. Start, MD, former medical director for the Oklahoma Department of Corrections and former director for the Texas Department of Corrections (TDC), recently received the National Commission on Correctional Health Care's Award of Merit at the commission's 11th National Conference in Chicago. Dr Start is the second recipient of the annual award. The 1986 award went to Alan Nelson, MD, then chairman of the American Medical Association's Board of Trustees.

Dr Start was cited for leading the fight to prohibit physicians from participating in capital punishment and for leadership in improving correctional health care.

In the presentation of an inscribed silver platter, B. Jaye Anno, PhD, vice president of HCCHC and former assistant director for health services at TDC, said, "No one has worked harder to improve correctional health care than Dr Start, and no one has done more than he has in encouraging all of us to strive for excellence. . . . Thank you, Armond, for being that sometimes lonely but always loud clear voice urging us to do what is right." □

## **HIV testing** *(continued)*

ordering a single test," Sherer says.

In no way is the HIV-antibody test "routine," he says. "Every HIV-antibody test should be preceded by written informed consent, which includes a detailed explanation of the test and its meaning, the reason for ordering the test, and its potential adverse consequences. In addition, explicit counseling regarding AIDS and HIV transmission and its prevention should accompany every test, as well as notice of the option of anonymous testing (where available) at counseling and testing sites. Confidentiality safeguards are essential, but the physician's ability to guarantee them with certainty in hospitals and offices is limited and should be honestly portrayed as such to patients."

The report and commentary appeared in the January 8 issue of the *Journal of the American Medical Association*. □

— OFFICIAL CALL —

The House of Delegates of the

**OKLAHOMA STATE  
MEDICAL ASSOCIATION**

Will Convene  
Its

**82nd ANNUAL MEETING**

at

**SHANGRI-LA RESORT ON GRAND LAKE  
NEAR AFTON, OKLAHOMA**

**MAY 5 through 7, 1988**

Opening Session: 9 a.m., Friday, May 6

Closing Session: 9 a.m., Saturday, May 7

All members, delegates, alternate delegates, and county society officials are encouraged and urged to attend. Business to be brought before the House of Delegates must be submitted by April 6, 1988. All items of business will be debated in open reference committee hearings on May 6, 1988.

Any member of the association may submit business for consideration by the House of Delegates. For help in preparing information for submission, please contact OSMA headquarters, 601 Northwest Expressway, Oklahoma City, Oklahoma 73118, 405-843-9571 or 1-800-522-9452.

**Larry Long, MD  
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## Doctors poorly informed

# ACP calls for better training in drug therapy

Physicians and medical students need better education in selecting and administering medication, according to the American College of Physicians (ACP), the nation's largest medical specialty society.

Physicians should also improve communication with patients about medications, and re-evaluate the pharmaceutical industry's role in providing drug information, says the ACP in "Improving Medical Education in Therapeutics," a position statement published in the January *Annals of Internal Medicine*.

Physicians' knowledge of drug therapeutics has not kept pace with advances in diagnosis, according to the statement. The amount of medication prescribed by US doctors has increased dramatically in recent decades as new drugs have become available, and more medication is given per patient in this country than in many others. However, studies show that a significant number of US prescriptions either specify inappropriate doses or are unneeded, notes the college.

The timing of pharmacology courses in medical school curriculums is one cause of this problem, the statement says. Second-year students — with little or no hospital experience — study drugs "used to treat diseases with which they have only passing acquaintance," according to the ACP. Some medical schools have already begun teaching more therapeutics in the later clinical-training years; the ACP urges all schools to make such changes.

The ACP's statement discusses how physicians at all levels can systematically update their knowledge of medications and review basic prescribing principles; it also encourages research into new learning methods.

Doctors and medical students should increase their understanding of the evaluation process for new medications, and evaluate pharmaceutical industry claims more objectively, states the ACP, noting that the industry is a major source of drug education for many physicians. Verbal presentation of new-drug information to small groups or individual doctors by an industry sales representative has been found highly persuasive; records show that medical residents, who write most hospital prescriptions, tend to prescribe the most recent and novel drugs available.

Patients also should be better informed about

medications, and should be encouraged to discuss with their doctors adverse drug effects and other problems or questions, the ACP says. Printed material can be used to supplement personal discussion.

Included in the same issue of *Annals* is an editorial, "Medical Student Education in Clinical Pharmacology and Therapeutics," that supports the ACP's position statement and proposes additional ways of improving drug-therapy education. □

## Gremlins at work

### **OSMA issues corrections for 1988-89 directory listings**

The Oklahoma State Medical Association makes every effort to ensure the accuracy of listings in its biannual directory. Nevertheless, errors do occur, and this year has been no exception.

With apologies to those who have been inconvenienced, the OSMA has issued the following corrected listings for its newly released 1988-89 OSMA Medical Directory:

Edward Ellis, MD  
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William E. Hall, MD  
David E. Ryker, MD  
Brian K. Hall, MD  
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(continued)

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## **Corrections** *(continued)*

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## **A REMINDER**

**To OSMA Members**

*The deadline for payment  
of 1988 dues is March 31.*

**News items  
for the May issue of  
the *Journal*  
must be in the editorial  
office no later than April 1**



More humanities

## University liberalizes pre-med requirements

In an effort to promote a more liberal education of medical students, the University of Pennsylvania School of Medicine, Philadelphia, will no longer require specific undergraduate courses for admission, according to a report from the school.

In a break from general practice among medical schools, the Pennsylvania school will define the knowledge and skills it considers essential for students who wish to study medicine, but will not specify courses that are prerequisite for admission. In the report, the school also expresses the hope that other institutions will follow suit and adopt similar policies.

The school's departure from past admission criteria is a response to the need for future medical students to acquire an undergraduate education that encompasses a broader study in the humanities, say the report's authors, Fredric D. Burg, MD, associate dean for academic programs, and colleagues.

According to the report, it is hoped that this admissions approach will have a liberating effect on the undergraduate education of students interested in medical careers, providing them more flexibility in choice of courses. The authors hope that the "policy will provide opportunities for the creation of more efficient academic programs during the baccalaureate years, allowing some students to master the recommended knowledge and skills with fewer or different courses than those commonly required so that they may benefit from more elective time.

"We also hope that this new policy will give more freedom during baccalaureate education to students who have major interests in other disciplines, such as engineering, anthropology, education, and economics, and who wish to pursue careers in medicine. It is our belief that major advances in health care will be led by individuals who have such multidisciplinary perspectives."

The new policy will be used for the first time to select applicants for the 1988 entering class. The school will continue to rely on other standard admissions credentials, including academic transcripts, MCAT (Medical College Admission Test) scores, letters of recommendation, personal essays, and interview reports. "It is our belief that these credentials will give an acceptable indication of an applicant's level of preparation and that any significant underpreparation will be adequately

revealed by the available admissions credentials as it was when specific course requirements were in place," the authors state. They say they hope that adoption of this policy will lead other medical schools to examine the way in which they prepare students for medical careers.

The report appeared in the January 15 issue of the *Journal of the American Medical Association* (JAMA).

In an accompanying commentary, JAMA Senior Editor Bruce B. Dan, MD, describes his experience in retaking the MCAT last April, nearly 20 years after his first encounter with the grueling, all-day exam. As a fair test of a student's understanding of scientific principles, Dan gives the MCAT a failing grade, saying it "places its reliance on recall of facts of small importance." He says the questions examine test-taking ability, not reasoning, comprehension, or cognition. "MCATs serve no other purpose than to

(continued)

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## Competitive hospitals keep patients longer

A study released in February shows a strong association exists between the number of hospitals in an area and the average length of time patients stay in the hospital after surgery.

Competitive pressures appear to encourage hospitals to accommodate patient and physician preferences for longer lengths of stay, say the authors of the report, James C. Robinson, PhD, of the University of California School of Public Health, Berkeley, and colleagues at the University of California School of Medicine, San Francisco.

Their findings suggest that patients, physicians, and hospitals will have a difficult time adjusting to recent changes in the reimbursement methods of Medicare and other programs aimed at slowing down the rapid rise in health care costs.

The researchers analyzed data from 747 US hospitals involving 498,454 patients who underwent surgery in 1982, the year before the introduction of Medicare's Prospective Payment System. The study examined ten different surgical procedures, including intestinal operations, hip replacements, stomach operations, and hysterectomies, and was controlled for patient age, sex, and presence of secondary diagnoses and procedures.

The authors found that "hospitals in the most competitive markets reported average lengths of stay 16.9% higher . . . than comparable hospitals that

had no nearby neighbors." The same strong association between competitive pressure and average hospital stay existed for all ten surgical procedures examined, they report.

"Patients generally prefer longer to shorter postoperative lengths of stay to reduce the subsequent burden of nursing on themselves and family members at home," the authors say. Their findings "are consistent with the hypothesis that patients and physicians tend to prefer longer over shorter lengths of stay for surgical procedures and that hospitals under competitive pressure are more likely to accommodate those desires than hospitals not under such pressures."

According to the authors, the replacement of retrospective by prospective reimbursement methods by Medicare and a variety of Medicaid and private insurance programs, has exerted a dramatic effect on the hospital care marketplace. Because these programs pay a fixed rate per admission within particular diagnostic categories, hospitals that permit longer stays are financially penalized.

Hospitals now face severe economic pressures that limit their ability to compete for patients with costly strategies, such as allowing longer hospital stays. Those which in the past allowed the longest stays are being forced to adjust their discharge protocols and to convince their affiliated physicians to also adjust their practice.

"Patients utilizing these hospitals will need to make substantial adjustments in financial and time commitment, given the increasing proportion of total postoperative recovery time that will occur in the home rather than the hospital. The data reported in this study suggest that the adjustment process will be particularly difficult for hospitals, physicians, and patients in competitive local markets, precisely because of the preexisting effects of competition on practice styles," the authors conclude.

The study was reported in the February 5 issue of the *Journal of the American Medical Association*. □

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### Requirements *(continued)*

start a prospective medical student's attitude on the wrong foot and to cull our test-takers so they can later become test-givers.

"If the MCAT were a laboratory test," Dan says, "its sensitivity, specificity, and predictive value are so poorly known that it would be discarded as useless." If medical school admissions committees continue to emphasize the "results of one day of exhausting trivial pursuit," he suggests, they at least should require their members to take the tests themselves at frequent intervals.

"To do otherwise is analogous to using a laboratory test that one is neither familiar with nor has ever used before. We ought to at least apply the same standards to identifying future physicians as we do to identifying microorganisms," Dan says. □

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The investigator reported that one-third of the rats were improved on the experimental medication, one-third remained the same and the other third couldn't be reported on because *that* rat got away.

Edwin Bidwell Wilson

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## Blood pressure study identifies "white coat" hypertension

Twenty-one percent of patients with borderline high blood pressure may suffer from "white coat" hypertension — blood pressure that jumps during a visit to the doctor but is otherwise normal, according to a study released in January.

The "white coat" hypertension phenomenon appears to be more common among younger women, concludes the study by Thomas G. Pickering, MD, DPhil, of the New York Hospital-Cornell University Medical Center, New York City, and colleagues. In addition, they say, the effect appears to be more pronounced when blood pressure is measured by a male physician than by a female technician.

It is well known that a visit to the doctor may provoke a boost in blood pressure. But the new study sought to estimate what percentage of patients with elevated blood pressure in a clinic setting had normal pressures at other times ("white coat" hypertensives) and examine factors that might identify these patients.

Three groups were studied: 37 volunteers with normal blood pressure; 292 borderline hypertensives (average clinic-measured diastolic blood pressure of 90-104 mm Hg); and established hypertensives (clinic diastolic blood pressure above 105 mm Hg). All subjects wore noninvasive ambulatory blood pressure monitors for 24 hours and had their pressures measured in a clinic setting by a female technician and male physician. All were untreated at the time of the study.

Patients with elevated clinic blood pressure readings were classified as exhibiting the "white coat" phenomenon if their clinic blood pressures were elevated but their 24-hour pressures were normal. Twenty-one percent of the borderline hypertensives fit this definition; interestingly, so did 5% of the established hypertensives, the authors report.

Patients with white coat hypertension were more likely to be female and younger than patients whose pressures were elevated both in the clinic and during ambulatory monitoring, the researchers say. They also were more likely to weigh less and to have been diagnosed more recently.

The authors cannot explain exactly what causes



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## **Hypertension** (continued)

the white coat effect. Their research and that of others shows the phenomenon more pronounced when pressure is taken by a doctor than by a technician, with "the most obvious explanation . . . that the rise in blood pressure is due to anxiety," the authors say. However, they add, arguing against this is the fact that the effect can persist in patients who are followed up for many years, that it does not necessarily habituate with repeated visits, and that such individuals don't usually give the impression of being anxious. An alternative explanation may be that the phenomenon is a conditioned response, the authors say.

It is also possible that the white coat effect "may be, to some extent, gender specific," the authors add. "We have observed that it is more common in women, and the differences between the readings taken by a physician vs a nurse or technician might be related to the stereotype of the physician as a male authority figure, and the nurse or technician as a female in a more empathic role.

"Taken on their own, the results of this study do not permit any definitive recommendations regarding prognosis or treatment," they say. "But when placed in the context of other reported data, they suggest the possibility of being able to identify a low-risk group in whom the need to initiate treatment is questionable.

"The findings that white coat hypertension is more common in younger patients with a shorter history of hypertension, and that it is relatively common in women, would all suggest that a period of observation is appropriate before making any (treatment) decisions. It has been known for many years that the prognosis of hypertension is better in women than in men, and the benefits of treatment in white women remain unproved. Our results may also suggest a very simple explanation for this phenomenon: many of these women are not truly hypertensive."

The study appeared in the January 8 issue of the *Journal of the American Medical Association*.



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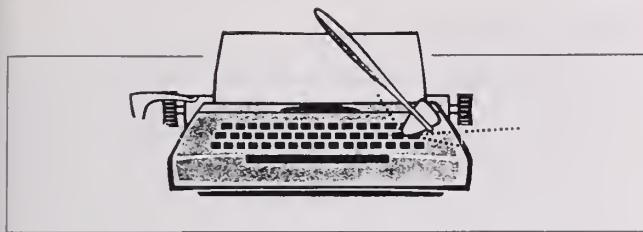
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## REACTION TIME



### Try a little humility today . . .

*To the Editor:* It was with pleasure that I read your editorial article in the latest issue of the JOURNAL [Dec 87], and I think it was a real good one.

The word *humility* is broad in its nature and covers a great deal of ground which is certainly worthwhile.

Personally, I have used the word *modesty* on some occasions, and I have thought that my father, the late B.D. Woodson, MD, set a fairly good example of modesty in this area.

In fact, his modesty, in my own opinion, stood out on some occasions, where it was a discredit to him, for the reason that he would insist on credit going to the family physician at times, when in consultation, he was due the credit himself.

I agree 100% with your article, that the word *humility* is an excellent word and should be used in daily life by all of us, more than we do, and it covers more ground by far than the word *modesty*.

Many thanks to you.

Earl M. Woodson, MD  
Poteau

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## BOOK SHOP

**The Celebration of Medical History: The Fiftieth Anniversary of the Institute of the History of Medicine and the Welch Medical Library.** Edited by Lloyd G. Stevenson. Baltimore: Johns Hopkins University Press, 1982, pp 228, \$17.00.

On October 17, 1929, the Johns Hopkins Institute of the History of Medicine was opened. At the 1979 semicentennial celebration several essayists discussed various aspects of medicine and medical history. Six of the essays dealing with the history of medicine are by scholars from six countries. They range from discussion of general topics such as causes and pseudocauses of disease to specifics such as medicine in English and French societies, the former during the age of Shakespeare and the latter at the end of the Ancien Régime. Each of these chapters is followed by commentary by another historian.

Janet B. Koudelka discusses the genesis of the Welch Medical Library and the Institute of the History of Medicine in an interesting fashion. She describes the role of John Shaw Billings, who designed the Johns Hopkins Hospital, and that of members of the medical faculty in relationship to the library. Her contribution contains many interesting anecdotes and vignettes.

Dr Frank B. Rogers discusses the origin of MEDLARS, the computerized retrieval system employed at the National Library of Medicine, of which Rogers was director from 1949 to 1963. Robert

S. Morrison, formerly director of the Rockefeller Foundation, provides a very interesting chapter on the role of the foundation in launching and funding the Institute of the History of Medicine.

Dr Witfill J. Bell, Jr., of the American Philosophical Society, presents an interesting history of medical libraries in his chapter entitled "Private Physician and Public Collections: Medical Libraries in the United States Before 1900." He has carefully researched his topic and points out the role of many physicians in the establishment and maintenance of medical libraries.

Johns Hopkins has long demonstrated an active interest in the history of medicine as well as its own past. This book is a fine tribute to two important components of the Hopkins. As with most collections of essays, some contributions will appeal to different audiences, but most everyone with any interest in the history of medicine and of medical libraries will find something of interest here.

Harris D. Riley, Jr., MD  
Oklahoma City

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**Pediatric Orthopedics in Clinical Practice.** By Peter V. Scoles. Chicago: Year Book Medical Publishers, Inc, 1982. Pp 241, illus.

The author, in the preface, states that this book was written to furnish a basic reference in orthopedics for physicians who provide primary care for children. He emphasizes that physicians who treat

## DEATHS

### Charles Wallace Coyner, MD 1939 - 1988

Charles W. Coyner, MD, a native of Oklahoma City, died January 4, 1988. Dr Coyner was graduated from the University of Oklahoma College of Medicine in 1977 and completed a family medicine residency in 1980. He established a private practice in Edmond the same year.

### Cecil Reid Reinstein, MD 1915 - 1987

Retired Enid physician Cecil R. Reinstein, MD, died August 14, 1987. Dr Reinstein, Garfield County health director and medical examiner for many years, was born in Savannah, Ga, and graduated from the Medical College of Georgia, Augusta. He practiced medicine in Georgia, Idaho, Wyoming, and Colorado, before moving to Enid in 1967. Dr Reinstein served with the US Army during both World War II and the Korean conflict.

### James C. Smith, Jr., MD 1914 - 1987

OSMA Life Member James C. Smith, Jr., MD, Tulsa, a native of Chicago, died December 30, 1987. A 1943 graduate of the University of Illinois, Dr Smith served his internship in Tulsa prior to going on active duty with the US Navy in the South Pacific. He later completed his residency in Tulsa and practiced for nine years in Omaha, Tex, before returning to Tulsa. Dr Smith, a family practitioner, retired in January 1984.

### Glen Franklin Wade, MD 1903 - 1988

Glen F. Wade, MD, a Life Member of the OSMA, died January 12, 1988, in Oklahoma City. Dr Wade was born in Mangum in 1903 and in 1944 was graduated from the University of Oklahoma School of Medicine. He established a general practice in Oklahoma City and retired in 1980.

## Book Shop (continued)

children encounter a wide variety of congenital, developmental, and traumatic disorders of the trunk and limbs. Early diagnosis and prompt treatment are often key factors in a successful outcome. This book is not intended to be a comprehensive textbook in pediatric orthopedics but rather a practical guide to common musculoskeletal disorders seen by the pediatrician or the family physician.

*(continued)*

## IN MEMORIAM

### 1987

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<i>Edgar W. Young, Jr., MD</i>	<i>April 12</i>
<i>Paul Newman Atkins, Jr., MD</i>	<i>April 20</i>
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<i>Cecil Reid Reinstein, MD</i>	<i>August 14</i>
<i>Alwin Marshal Clarkson, MD</i>	<i>September 1</i>
<i>Rex Elmer Kenyon, MD</i>	<i>September 16</i>
<i>Charles P. Bondurant, Jr., MD</i>	<i>October 12</i>
<i>James C. Smith, Jr., MD</i>	<i>December 30</i>

### 1988

<i>Charles Wallace Coyner, MD</i>	<i>January 4</i>
<i>Glen Franklin Wade, MD</i>	<i>January 12</i>



It is divided into nine chapters. The first describes evaluation of the musculoskeletal system. This section is richly supplemented with illustrations that depict the normal range of motion of various joints and topographic anatomy. This is followed by a chapter dealing with musculoskeletal trauma in which the most common types of injuries are reviewed. In the chapter entitled "Lower Extremity Development," the section on development of gait is particularly informative. Also useful are the discussion of torsional deformities of the legs and varus and valgus deformities of the legs.

The succeeding chapters are entitled "The Knee," "Congenital Hip Disease," "Developmental Disorders of the Hip," and "The Spine." A chapter is devoted to musculoskeletal infections, and the final chapter, entitled "Neuromuscular Diseases," covers cerebral palsy and myopathic and neuropathic diseases.

Among the book's strongest features are the illuminating diagrams and the high-quality reproduction of radiographs.

This relatively small book gives a satisfactory overview of musculoskeletal disorders in infants and children and succeeds in its stated purpose.

*Harris D. Riley, Jr., MD  
Oklahoma City*

**Vascular Disorders of Childhood.** Edited by Richard H. Dean and James A. O'Neill, Jr. Philadelphia: Lea & Febiger, 1983. Pp 205, illus, price \$27.50.

A wide variety of disorders affects the extracardiac vascular system during infancy and childhood; these are both congenital and acquired. No previously available text has been devoted exclusively to such disorders in this age group. Such vascular disorders are managed by a variety of medical specialists, so this book fills a significant need.

The book is edited by two members of the Department of Surgery at Vanderbilt University Medical Center. The other eight contributors are all members of the surgical faculty at Vanderbilt.

The book begins with a discussion of the embryologic development of the vascular system. This is followed by an excellent chapter on anomalies of the aortic arch system. This chapter discusses lesions such as the double aortic arch, left aortic arch and variations, aberrant right subclavian artery, right aortic arch, and rarer malformations of the aortic arch system.

The next two chapters discuss the two types of

coarctation of the aorta — isthmic and subisthmic. Dean and H. William Scott, Jr., then review investigations of hypertension in coarctation. Worth noting is Dean's review of renovascular hypertension during childhood and the comprehensive listing of correctable forms.

Dean contributes two valuable chapters, "Uncommon Arteriopathies in Childhood" and "Congenital Arteriovenous Malformation." These chapters are particularly useful because they group together these lesions that occur in different body systems.

O'Neill, in the chapter entitled "Portal Hypertension in Childhood," provides a comprehensive and up-to-date discussion of this important topic.

Another group of unusual disorders is discussed in the chapter entitled "Lymphatic Disorders of Childhood." The final two chapters deal with atherosclerosis in childhood and traumatic vascular lesions in infancy and childhood.

The illustrations, charts, and diagrams throughout are excellent. Most of the chapters are succinctly written and include an up-to-date bibliography. If there is any criticism of this book it is that all of its contributors have a surgical orientation, as would be expected. Its breadth would be more balanced if there were more pediatric input. This is a minor criticism and the book is, overall, an excellent one. It is certainly recommended.

*Harris D. Riley, Jr., MD  
Oklahoma City*

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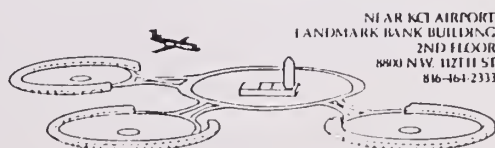
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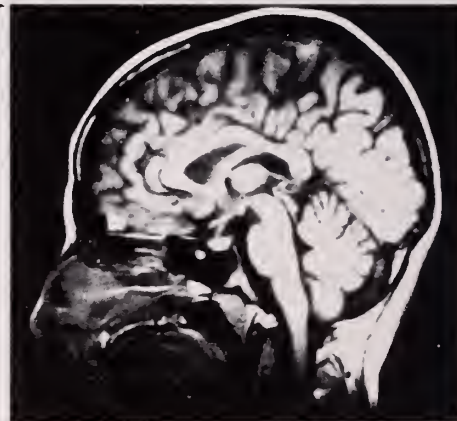
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Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

**Contraindications:** There are no known contraindications to the use of Tagamet.

**Precautions:** While a weak antiandrogenic effect has been demonstrated in animals, Tagamet has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilization capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving Tagamet.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of Tagamet HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to Tagamet therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

Tagamet has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlordiazepoxide, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when Tagamet is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either Tagamet 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

did not demonstrate less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. (Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.)

Lack of experience to date precludes recommending Tagamet for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

**Adverse Reactions:** Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states (e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation), predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving Tagamet, particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in Tagamet-treated patients (approximately 1 per 100,000 patients), including agranulocytosis (approximately 3 per million patients), have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia (approximately 3 per million patients) and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly unlikely.

A single case of biopsy-proven portal hepatic fibrosis in a patient receiving Tagamet has been reported.

**How Supplied:** Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 (intended for institutional use only); 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 (intended for institutional use only), and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 (intended for institutional use only).

**Liquid:** 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 (intended for institutional use only).

#### **Injection:**

**Vials:** 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

**Prefilled Syringes:** 300 mg./2 ml. in single-dose prefilled disposable syringes.

**Plastic Containers:** 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

**ADD-Vantage® Vials:** 300 mg./2 ml. in single-dose ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

Tagamet HCl (brand of cimetidine hydrochloride) injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

\* ADD-Vantage® is a trademark of Abbott Laboratories.

BRS-TG:1738

Date of issuance Apr. 1987

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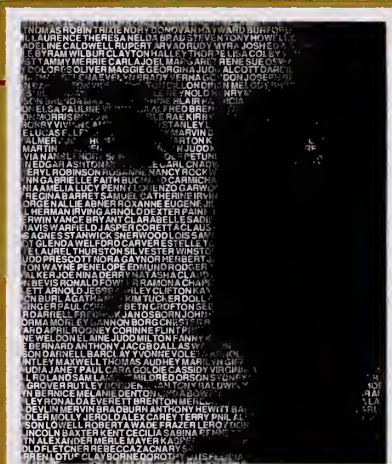
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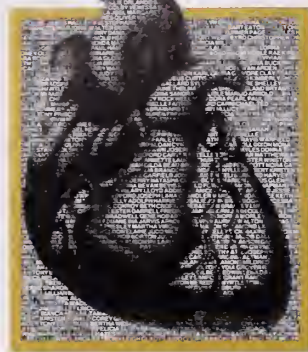
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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

**INDERAL<sup>®</sup> LA** brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** INDERAL LA is formulated to provide a sustained release of propranolol hydrochloride. INDERAL LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** INDERAL is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by INDERAL, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with INDERAL LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of INDERAL Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to INDERAL LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, INDERAL LA has been therapeutically equivalent to the same mg dose of conventional INDERAL as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. INDERAL LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE.** **Hypertension:** INDERAL LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. INDERAL LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** INDERAL LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** INDERAL LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** INDERAL LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. INDERAL LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** INDERAL is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with INDERAL.

**WARNINGS.** **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or INDERAL should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of INDERAL therapy. Therefore, when discontinuance of INDERAL is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If INDERAL therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute INDERAL therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** INDERAL should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY:** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOLYCEMIA:** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS:** Beta blockade may mask certain clinical signs of hyperthyroidism. The abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing  $T_4$  and reverse  $T_3$ , and decreasing  $T_2$ .

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL:** Propranolol should be used with caution in patients with impaired hepatic or renal function. INDERAL (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be cautioned that INDERAL may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS:** Elevated blood urea levels in patients with severe heart disease, elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS:** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if INDERAL (propranolol HCl) is administered. The add catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope, ataxic or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenylephrine, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrene and lidocaine have reduced clearance when used concomitantly with propranolol. Thyroxine may result in a lower than expected  $T_3$  concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY:** Pregnancy Category C. INDERAL has been shown to be embryotoxic in animals at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. INDERAL should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS:** INDERAL is excreted in human milk. Caution should be exercised when INDERAL is administered to a nursing woman.

**PEDIATRIC USE:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dream appear dose related.

**Gastrointestinal:** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** Bronchospasm.

**Hematologic:** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** INDERAL LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from INDERAL Tablets to INDERAL LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. INDERAL LA should not be considered a simple mg-for-mg substitute for INDERAL. INDERAL LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg INDERAL LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg INDERAL LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg INDERAL LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, INDERAL LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg INDERAL LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

#### Reference:

1. Data on file, Ayerst Laboratories.

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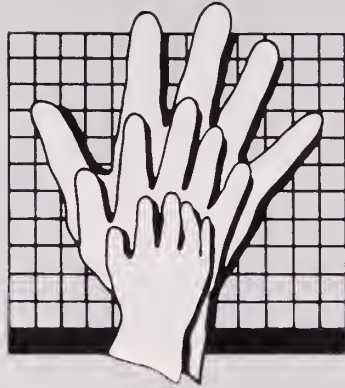
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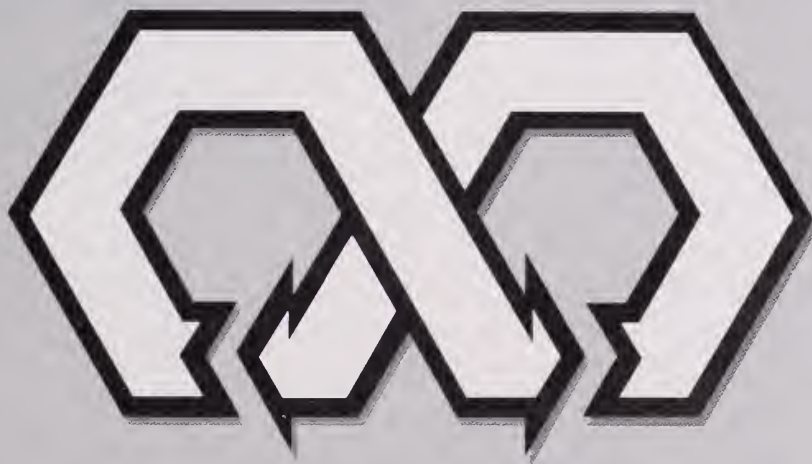
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### Doctors' Day

Although the "horse and buggy" have been replaced by the medical evacuation helicopter and the "little black bag" has been exchanged for a sophisticated battery of computerized and nuclear diagnostic testing equipment, the dedication of the physician remains timeless.

This year will mark the 55th observance of a Doctors' Day tradition that began with Georgia's Barrow County Medical Auxiliary. Eudora Brown Almond's love and respect for her family physician in the small village of Fort Lamar has developed into a tradition which is now observed by communities across the nation. Mrs Almond's respect for and appreciation of the noble achievements of the profession inspired her to present to her local auxiliary the idea of having a day on which to honor the practitioners of the Medical Arts. March 30 was selected as Doctors' Day in tribute

to Dr Crawford Long who administered sulphuric ether in a surgical operation, in the year 1842, for the first time in medical history.

There are numerous ways in which doctors have been honored over the years, from the traditional red carnation, which is the symbol of Doctors' Day, to original ideas including formal dinners, blood drives, planting trees in honor of physicians, essay writing contests for grade school age patients, and "I LOVE MY DOCTOR" T-shirts worn by physicians' office staff. Many civic-related projects have also been used to honor doctors.

All of these ideas emphasize the reason for the celebration . . . that we truly appreciate the practitioners of the healing arts.

*Anita Callaway  
State Doctors' Day Chairman*

## THE LAST WORD

■ **February 14 was Curtis B. Cunningham Day** in Clinton. Dr Cunningham, retiring after 51 years of medical practice, was honored for his many years of service in Custer County, including the delivery of more than 5,500 babies. The general practitioner has also been active in community projects for many years.

■ **A special thank you is in order to Ms Becky Anders and Whitehall Laboratories** for their generous contributions to the OSMA Capitol First Aid Station. Their donations are greatly appreciated.

■ **The Oklahoma State Department of Health** is seeking physicians interested in joining an AIDS Speakers Bureau. Physicians will be trained to make educational presentations to hospital medical staffs, other groups of physicians and health professionals, and business and civic groups. Speakers are needed outside the Tulsa and Oklahoma City areas. Those interested should contact the OSMA Ad Hoc Committee on AIDS, 601 Northwest Expressway, Oklahoma City, OK 73118.

■ **Jim Williams, former vice president of the Arkansas peer review organization,** is the new director of the Oklahoma Foundation for Peer Review. He succeeds Neal Thrift.

■ **This year's OSMA/Oklahoma Special Olympics campaign** was launched last month, with OSMA Past President **James B. Eskridge III, MD,** Oklahoma City, at the helm once again. State physicians were contacted in February and asked to make their Special Olympics contributions through the OSMA. Their donations in the past three years have totaled nearly \$15,000 and are now being accepted for this year's games, scheduled in May. Also, physicians interested in providing physical examinations for needy Special Olympians are being asked to call the Special Olympics office, 1-800-722-9004 or 1-918-747-9535.

■ **Topical eye drugs, especially when used improperly,** may cause not only eye injuries but systemic problems as well. A letter in January's *Archives of Ophthalmology*, noting that many ophthalmology patients often are prescribed

multiple eye medications, says the potential for misuse of these drugs by patients who inadvertently mix up the caps on the different bottles. "We have noted numerous situations where bottles and caps are mismatched, especially in our elderly patients with glaucoma who have advanced optic nerve damage and use as many as three types of topical eye drugs routinely, and often five types in the early postoperative period when they are further incapacitated," write Ronald E. P. Frenkel, MD, of Detroit, and colleagues. Color-coordinating caps and bottles might help protect against such accidents, the letter says. "An additional possibility would be to have varying threading sizes of the caps so that each colored cap could only screw onto the identically colored bottle," they suggest.

■ **Alcohol use alters adult iron metabolism,** predisposing to excess iron storage in the liver and possibly liver damage. Now, a study in February's *American Journal of Diseases of Children (AJDC)* says adolescent alcohol users have elevated serum iron concentrations that increase incrementally with drinking frequency. Authors Ira M. Friedman, MD, now of the University of California, Berkeley, and colleagues looked at drinking frequency and iron metabolism in 591 male and 614 female teenagers who took part in a national health survey in the 1970s. Alcohol had greater effects on iron metabolism in males than females; transferrin (an iron-transporting protein) saturation and hemoglobin concentration in the males paralleled their alcohol use. "These abnormalities may be precursors of hepatic iron overload and chronic liver damage," the authors conclude, saying more long-term research is needed.

■ **Thomas R. Russell, MD, has been awarded** the 1987 Blesh-Rucks Award at the Oklahoma City Clinic. The award, established in 1965, is given annually by the Oklahoma City Clinic physicians to that colleague who exhibits excellence in clinical practice. A cardiologist, Dr Russell has practiced at the clinic since 1971. Currently he is serving as vice president of the clinic's board of directors. The award was established in honor of the clinic's founders, Drs Abraham L. Blesh and William W. Rucks. □

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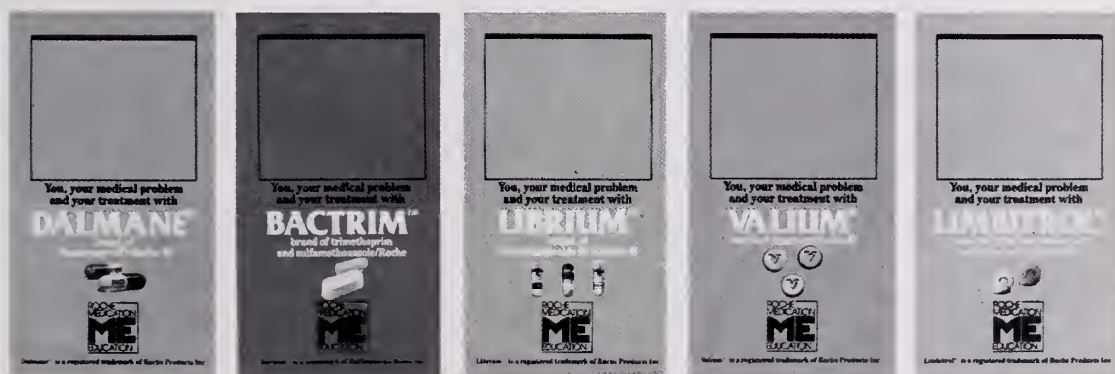


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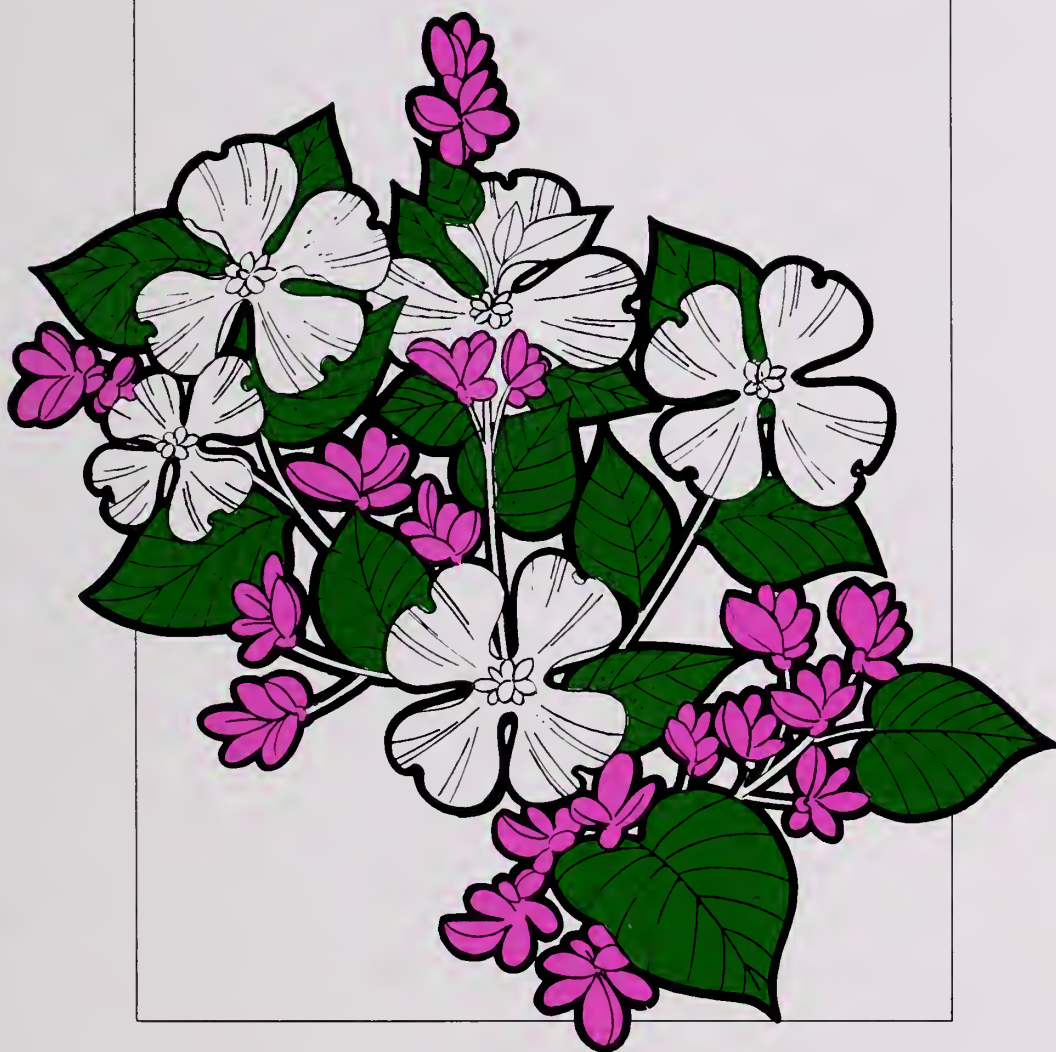
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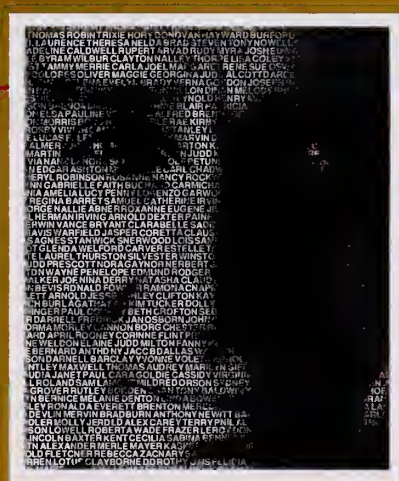
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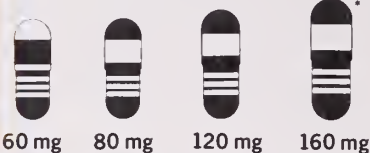
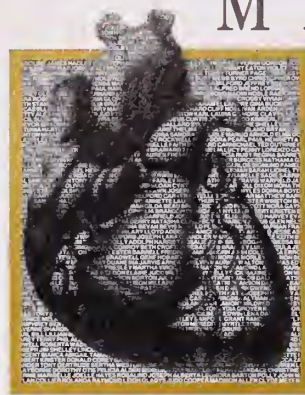


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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

**INDERAL<sup>®</sup> LA** brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE.** **Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS.** **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it is usually advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY:** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOLYCEMIA:** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS:** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing  $T_4$  and reverse  $T_3$ , and decreasing  $T_3$ .

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL:** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return of increased intraocular pressure.

**CLINICAL LABORATORY TESTS:** Elevated blood urea levels in patients with severe heart disease elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS:** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The additive catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncopal attack or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytin, phenobarbitone, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrene and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected  $T_3$  concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Thiophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY:** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS:** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**PEDIATRIC USE:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

**Gastrointestinal:** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** Bronchospasm.

**Hematologic:** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** Alopecia, LE-like reactions, psoriasisform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin, serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSEAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal Tablets. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION—Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS—Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE—Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE—**At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

#### Reference:

1. Data on file, Ayerst Laboratories.

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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION

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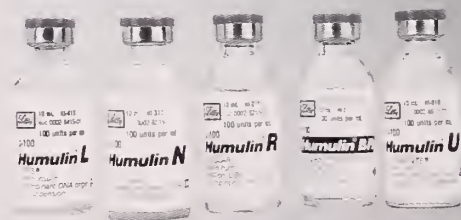
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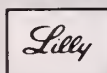
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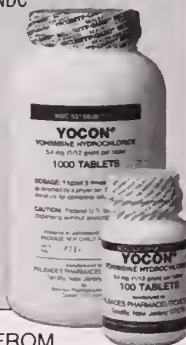
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#### References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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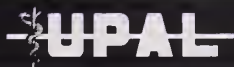
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### SATURDAY, MAY 14, 1988

- 7:00 AM *Registration and Continental Breakfast (provided)*  
7:45 AM Welcome: Clyde B. Jensen, Ph.D. (OCOMS)  
8:00 AM AIDS — Overview and Epidemiology from a National Perspective: John Harkess, M.D. (CDC)  
8:30 AM Psychological Impact of AIDS upon the Health Care Delivery System — David Baron, D.O. (NIMH)  
9:30 AM *Coffee Break (provided)*  
9:45 AM Therapeutics of Opportunistic Infections and Antiviral Therapy in AIDS Patients — Francis Blais, D.O. (TCOMS)  
10:55 AM Staging and Protocol Requirements for More Effectively Treating AIDS Patients — Lawrence R. Deyton, M.D. (NIH), and Jeffrey A. Beal, M.D. (Tulsa)  
12:05 PM *Lunch with Speaker (provided)* — Nutritional Needs of AIDS Patients — Martin W. Banschbach, Ph.D. (OCOMS)  
1:05 PM Relationship between AIDS and Cancer — Parkash Gill, M.D. (USC)  
2:15 PM Confidentiality of Patient Records, Insurance Company Policies, and Discriminatory Practices — Bryn J. Henderson, D.O., J.D. (COMP)  
3:15 PM *Coffee Break (provided)*

- 3:30 PM AIDS — The Role of Public Health Counseling — Beth Dahl, R.N.C. (Oklahoma State Department of Health)  
4:30 PM Risk Exposure for Medical and Dental Health Care Providers — Dan H. Fieker, D.O. (OOH), and Kenneth R. Goljan, D.D.S., M.S. (Tulsa)  
5:30 PM ADJOURN

### SUNDAY, MAY 15, 1988

- 7:00 AM *Registration and Continental Breakfast (provided)*  
7:30 AM The Future Directions of a Statewide and a Metropolitan AIDS Program — Ron Toth, M.P.H. (Oklahoma State Department of Health) and Bill Pierson, M.B.A. (Tulsa City-County Health Department)  
8:30 AM Psychiatric Manifestations in the AIDS Patient — David Baron, D.O. (NIMH)  
9:30 AM *Coffee Break (provided)*  
9:45 AM Psychological Influences on Immunity — Janet Kiecolt-Glaser, Ph.D. (Ohio State University)  
10:45 AM The Role of Social Work with AIDS — Sue Cooper, M.S.W., C.S.W.-A.C.P. (Houston)  
11:45 AM Chronic Pain Control in AIDS and Oncology Patients — Winston Parris, M.D. (Vanderbilt Medical Center)  
12:45 PM Doubletree Brunch (provided)

Meal functions are provided for registered participants only — additional tickets may be purchased at the registration table.



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### Diseases, Inc.

Just about every disease known to man will be or has already been incorporated, foundationalized, or programmed. Tuberculosis, poliomyelitis, muscular dystrophy, amyotrophic lateral sclerosis, multiple sclerosis, arthritis, leukemia, heart disease, cancer and cystic fibrosis are a few that come to mind readily.

Now don't start accusing me of being against curing mankind of its scourges and plagues. I'm one hundred percent in favor of eliminating all diseases, past, present, and future. And I don't deny that public awareness of everything that threatens our good health and longevity is a good thing. I'm happy to acknowledge my obligation to every one of those millions of people who voluntarily contribute their time and money to promote knowledge about and the ultimate conquest of all diseases. I'm grateful.

I must admit, however, that my gratitude for incorporated diseases is, from time to time, moderated by my robust skepticism about the true purpose of disease corporations. History suggests most of them are as dedicated to their own survival as they are to the survival of mankind. I can't think of a single disease corporation that has disappeared. Even after the namesake plague loses its power to terrorize the public, even after cures and preventions are commonplace, disease corporations simply change names and continue to hustle contributions of time and money. Shrewdly, manipulators of these enterprises scheme to escape the disaster of future success by selecting succeeding diseases and disorders that are virtually immune to conquest.

There are lots of things I don't know about disease corporations. Like I don't know how many writers, artists, public relations consultants, receptionists, accountants, lawyers, printers, ad writers, and lobbyists are on the payrolls. I don't know how many square feet of office space, telephones, computers, duplicators, desks, file cabinets, and fancy station wagons are paid for. I don't know how many medical decisions are made by nonmedical people. I don't know if the real purpose of disease corporations is to prevent disease . . . or unemployment. Finally, I don't know how much the corporations have succeeded in stamping out disease.

For example, did the Polio Foundation support Dr Salk or Dr Sabin? Were the antituberculous and antineoplastic drugs discovered through research supported by disease corporations or pharmaceutical companies? Twenty years from now, will we still believe that mass mammography is worthwhile? Of what significance is the total, nonfractionated serum cholesterol determined on a single occasion in a nonfasting subject? Is the test for occult fecal blood in a subject on an unrestricted diet, and who might have bleeding gums or a sanguineous nasal exudate, of any real value?

Whatever the honest answers to these questions are, we know for sure that such programs can scare hell out of the public and promote business for doctors, laboratories, and hospitals. How many if any reductions in morbidity and mortality are effected is either unknown or unpublicized. The total cost of such salvation on a case rate basis would, I imagine, be enormous if calculated.

Maybe we should encourage the amalgamation of all disease corporations into one super holding company. We could call it the Unified Fund for Elimination of Disease (UFED). Its objective would of course be the absolute prevention of sickness. We could put all of our begs into one giant askit, have a single, month-long telethon, maintain one office, one staff, one etcetera, and prevent all extravagant duplication. Free screening for everything clinics for everyone could be sponsored by UFED at least once a month and conducted in every major shopping center in the country.

If such consolidation produced a disease corporation so large as to constitute a monopoly in violation of our antitrust laws, it could be broken down to smaller companies called DRG Disease Corporations. Of course, the efficiencies would not be as great and the savings would be less, but it would be a step in the right direction.

Once consolidated, we'd have a much better chance of finding out how much it costs to run a corporate disease, how many salaries are being paid, and who's in charge.

—MRJ

### Ring Out the Old, Ring In the New!

I suppose every president of the Oklahoma State Medical Association before me has accepted the challenge much as I have, full of expectations. Expectations of being able to change the course of medico-economic history and perhaps right some of the wrongs that have befallen our great profession in the past few years. The answers seem so clear and yet so complex.

We are a proud profession, with members dedicated to the betterment of mankind, dedicated to maintaining the health care of the American people. While I can report to you that we have made great strides in the science of medicine and have continued to practice the art of medicine, I see little to be happy about in the socio-economic arena.

The politicians continue to be successful in dividing and conquering us (although they don't need much help). We continue to be divided among ourselves, with a portion of our colleagues fairing well under third-party medicine and MAACS, while a large segment find it increasingly difficult to provide quality care with a decrease in reimbursement and a steady increase in overhead expenses. Those who are doing well refuse to see that they will be next; they refuse to join in an effort to thwart further inroads by all who would divide, conquer, and eventually destroy the greatest medical care system



in the world. Apathy is rampant — I do not know whether our will to resist is encased in frustration or in ill-advised optimism.

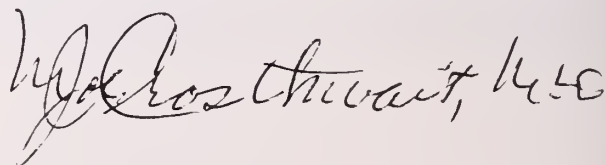
#### A New Beginning . . .

It has been with a great sense of pride and responsibility that I have served as your president for the past year. In May, we will inaugurate a new president, Dr Ray McIntyre. Ray has been in the trenches and in the battle. He will lend stature to our organization. Let's give him our help.

The Oklahoma State Medical Association is blessed to have a very fine staff. Their motivation, intuitiveness, and innovation in daily problem solving and long-range goals is unsurpassed. My thanks to Ed, Robert, Mike, Otie Ann, Claudia, and all the lovely young ladies who make it run so smoothly.

And to David Bickham, who is always far ahead of the power curve, who either had "the" answer or a thought-provoking question from which the answer emanated, my heartfelt thanks for making my job seem so easy.

My sincere thanks, also, to Julie Weedn, OSMA Auxiliary president, and the dedicated, hard-working members of the Auxiliary for their continued support.

A handwritten signature in dark ink, reading "W. J. Rosenthal, M.D." with a stylized flourish at the end.



# **Prenatal Care in Oklahoma: Estimated Numbers of Self-Pay Women in Financial Need for 1987**

**James C. Duke, MS; Sara Reed DePersio, MD, MPH; Richard R. Lorenz, MSPH;  
Mary Anne McCaffree, MD**

---

*With the recent economic decline of Oklahoma, numerous families find it difficult to obtain prenatal care. One important reason for this lack is their inability to pay.*

---

**F**or the past two decades, infant health care in the United States has been oriented toward developing neonatal intensive care technologies and facilities and regionalizing perinatal medical services. Yet, the infant mortality rate in the United States ranked twelfth among industrialized nations, despite an expenditure of \$5.5 billion.<sup>1</sup> The high incidence of low birthweight deliveries (less than 2,500 grams) partially contributes to this ranking.<sup>2,3</sup> The United States fares better, however, than most countries in promoting survival among low birthweight infants. This pattern of increased survival among low birthweight infants supports the contention that high technology medicine has been primarily responsible for minimizing perinatal mortality.

---

From the Maternal and Child Health Service, Oklahoma State Department of Health, and the Department of Pediatrics, University of Oklahoma College of Medicine.

This study was supported in part by Grant #263661, from the Division of Maternal and Child Health, Bureau of Health Care Delivery and Assistance, Public Health Service, and the United States Department of Health and Human Services awarded to University Associates, Lansing, MI 48912.

Direct correspondence to James C. Duke, MS, OUHSC Department of Pediatrics, P.O. Box 26901, Oklahoma City, OK 73190.

Costs incurred in providing high technology medical care are extreme. In Oregon, Curry and Howe reported that the monies expended providing care to five high-risk infants could provide prenatal care to 149 women.<sup>6</sup> Similar results have been reported from various other states.<sup>7-9</sup> During fiscal year 1984, Oklahoma Children's Memorial Hospital Neonatal Intensive Care facility spent more than \$11.7 million. For term deliveries, average patient costs were inversely related to the number of prenatal care visits. These data indicate that a 10% decrease in admissions receiving inadequate prenatal care could result in an annual savings of \$637,600 at this facility alone.

While it is now possible to save newborn infants through the use of advanced medical technology, the long-term consequences of extreme prematurity and the high costs associated with high technology medical care can be alleviated only through preventive prenatal services. However, recent economic hardships affecting the State of Oklahoma have created situations that could dramatically increase the incidence of low birthweight deliveries resulting from inappropriate prenatal care. As most preventive health care services do not traditionally produce immediate measurable benefits, such services usually suffer from inadequate public

Table 1. Distribution comparisons of 1985 Oklahoma live births, June-July 1986 live births, and 1986 survey respondents in relationship to the trimester prenatal care began and number of prenatal care visits

Parameter	1985 Live Births		June-July 1986 Live Births		Survey Respondents Births	
	N	(%)	N	(%)	N	(%)
<b>Trimester Prenatal Care Began:</b>						
None	548	(1.1)	156	(1.8)	1	(0.1)
First	36,550	(68.8)	5,965	(70.4)	645	(72.7)
Second	11,412	(21.5)	1,911	(22.5)	193	(21.7)
Third	2,928	(5.5)	445	(5.2)	49	(5.5)
Unknown	1,662	(3.2)	201	(2.4)	0	(0.0)
<b>Number of Prenatal Care Visits:</b>						
None	949	(1.7)	165	(1.9)	10	(1.1)
1 to 3	3,600	(6.8)	331	(3.8)	28	(3.2)
4 to 8	15,696	(29.5)	2,382	(27.4)	194	(21.8)
9	32,849	(61.9)	5,546	(63.9)	652	(73.5)
Unknown	765	(1.4)	254	(2.9)	4	(0.4)

funding. There should be increased emphasis to provide preventive prenatal services which have been demonstrated to be beneficial<sup>4,5</sup> and cost effective.

In an effort to document the need for expanded publicly supported prenatal health care services, the Maternal and Child Health Service of the Oklahoma State Department of Health conducted a statewide survey to estimate the number of low income pregnant women who do not qualify for public assistance but lack adequate financial resources to obtain private prenatal care. Also, this report evaluates the representativeness of survey respondents and income responses.

## METHODS AND MATERIALS

**Prenatal Care Questionnaire.** The development of the questionnaire was a result of State Health Department participation in a national study to evaluate prenatal care in coordination with University Associates of Lansing, Michigan.

The fixed-choice questionnaire utilized in this survey was designed to provide a basis for projecting financial need estimates for prenatal care services. Several items were designed specifically to delineate relevant demographics required to make accurate estimates. Joint cooperation required the survey to meet the needs of both the Maternal and Child Health Service of the Oklahoma State Department of Health and University Associates.

Direct sampling of women, immediately postpartum, was utilized for three principal reasons. First, a direct survey eliminated the reliance on untimely census and vital statistics data, though these data remain the common sources of needs estimation. Second, information received should reflect the most recent events and current needs among pregnant women. Many problems associated with recall bias were minimized since women were surveyed within 48 hours of delivery. Third, surveying women who were confined to postpartum facilities resolved numerous difficulties incurred with locating the target population.

To execute the survey, packets were mailed to each Oklahoma hospital licensed to provide obstetric services and reporting deliveries during 1985. Survey packets contained the following materials:

1. An endorsement letter from the Oklahoma Hospital Association addressed to hospital administrators which explained the importance of this project, encouraged hospital participation, and provided preliminary instructions.
2. A detailed instruction sheet to direct persons supervising the conduct of the survey within the hospital involved in the process of collecting data, recording pertinent survey information, and returning surveys for analyses.
3. Actual surveys which were to be delivered to

**Table 2. Comparisons of maternal age, race and education distributions among survey respondents who reported (N = 597) or did not report (N = 196) income**

Parameter	Reported Income	
	Yes No. (%)	No No. (%)
<b>Age (Years)</b>		
≤19	216 (83.7)	42 (16.3)
20-24	62 (52.5)	56 (47.5)
25-29	176 (70.7)	73 (29.3)
30-34	109 (84.5)	20 (15.5)
≥35	34 (87.2)	5 (12.8)
Chi-square = 51.93, df = 4, p < 0.005.		
<b>Race</b>		
American Indian	93 (76.9)	28 (23.1)
Black	48 (63.2)	28 (36.8)
Other	454 (76.6)	139 (23.4)
Chi-square = 6.69, df = 2, p = 0.035.		
<b>Education (Years)</b>		
≤8	25 (56.0)	11 (44.0)
9-11	72 (54.6)	60 (45.4)
12	252 (75.4)	82 (24.6)
13-15	130 (83.9)	25 (16.1)
≥16	129 (87.8)	18 (12.2)
Chi-square = 53.94, df = 4, p < 0.005.		

postpartum women. Instructions and confidentiality waivers were included as the cover to the survey forms.

- A return envelope was enclosed for completed surveys. A submittal form was attached to the back of each return envelope; on it, supervisors were to record the hospital name, survey period, number of deliveries, number of completed surveys, number of refusals, and number of unaccounted respondents.

Instructions for the survey requested that a seven-day period beginning between June 29, 1986, and July 26, 1986, be designated as the survey period for each hospital. Questionnaires were given to every woman who delivered during the specified seven-day intervals. The questionnaire was designed to be self-administered. Hospital staff were to provide assistance to women experiencing difficulties in answering or interpreting the questions.

One week following initial survey mailings, telephone contact was made with each hospital administrator to obtain the names of those persons assigned as survey supervisors and to answer any questions regarding the conduct of the survey. Contact was then made with the survey supervisors for verification and for ascertaining survey periods. To ensure the greatest response rate, follow-up telephone calls were made at various intervals when expected survey returns were not received. Frequent telephone contacts permitted early discovery of lost survey packets. Follow-up mailings were subsequently accomplished. If required, second mailings were sent to survey supervisors.

Potential biases introduced either through misrepresentation of the population by the sample or through unequal distributions of missing data were evaluated. Sample representativeness was evaluated using chi-squared analysis to compare distribution similarities for age, educational attainment, number of prenatal care visits, and trimester prenatal care among calendar year 1985 and June-July 1986 vital registrations. Similarly, income respondents and nonrespondents were compared for maternal age, race, education, method of payment for prenatal care, and status within the

**Table 3. Distribution of payment source for prenatal care services in relationship to level of poverty (Unshaded area represents self-pay women considered in need)**

Poverty Level		Payments Source					
		Insurance HMO, etc.	Medicaid	Other	Did Not Pay	No Care	Unknown
≤185%	N	12	20	88	7	3	1
	%	3.3	76.9	25.7	35.0	15.8	9.1
>185%	N	299	5	149	8	5	2
	%	81.2	19.2	43.6	40.0	26.3	18.2
Unknown	N	57	1	105	5	11	8
	%	15.5	3.9	30.2	25.0	57.9	72.7
Total		368	26	342	20	19	11



Table 4. Demographic and prenatal care characteristics for American Indians (AI), blacks (BL), and other (OT) racial groups by financial need status

Parameter		Financial Need Status							
		Yes				No			
		AI	BL	OT	Total	AI	BL	OT	Total
<b>Age group (years):</b>									
≤19	N	14	2	13	29	4	4	24	32
	%	48.3	6.9	44.8		12.5	12.5	75.0	
20-24	N	10	2	24	36	18	12	110	140
	%	27.8	5.6	66.7		12.8	8.6	78.6	
25-29	N	2	1	10	13	30	8	164	202
	%	15.4	7.7	76.9		14.8	4.0	81.2	
30-34	N	5	1	6	12	6	4	87	97
	%	41.7	8.3	50.0		6.2	4.1	89.7	
≥35	N	4	0	2	6	0	3	25	28
	%	66.7	0.0	33.3		0.0	10.7	89.3	
<b>Education (years):</b>									
≤8	N	2	0	6	8	0	1	5	6
	%	25.0	0.0	75.0		0.0	16.7	83.3	
9-11	N	10	1	21	32	4	4	32	40
	%	31.2	3.1	65.7		10.0	10.0	80.0	
12	N	18	4	24	46	27	15	162	206
	%	39.1	8.7	52.2		13.2	7.4	79.4	
13-15	N	5	1	4	10	21	2	97	120
	%	50.0	10.0	40.0		17.5	1.7	80.8	
≥16	N	0	0	0	0	6	9	114	129
	%	0.0	0.0	0.0		4.6	7.0	88.4	
<b>Trimester Care Began:</b>									
None	N	0	0	0	0	0	0	0	0
	%	0.0	0.0	0.0		0.0	0.0	0.0	
First	N	21	4	33	58	53	19	352	424
	%	36.2	6.9	56.9		12.5	4.5	83.0	
Second	N	12	2	21	35	4	12	49	65
	%	34.3	5.7	60.0		6.1	18.5	75.4	
Third	N	2	0	1	3	1	0	9	10
	%	66.7	0.0	33.3		10.0	0.0	90.0	
<b>Number of Prenatal Visits:</b>									
None	N	0	0	0	0	1	0	2	3
	%	0.0	0.0	0.0		33.3	0.0	66.7	
1-3	N	2	0	2	4	0	2	0	2
	%	50.0	0.0	50.0		0.0	100.0	0.0	
4-8	N	9	2	19	30	15	9	64	88
	%	30.0	6.7	63.3		17.0	10.2	72.7	
>9	N	24	4	34	62	42	20	344	406
	%	38.8	6.4	54.8		10.3	5.0	84.7	

**Table 5. Economic indicators for American Indians (AI), blacks (BL), and other (OT) racial groups by financial and need status**

Parameter	Financial Need Status							
	Yes				No			
	AI	BL	OT	Total	AI	BL	OT	Total
<b>Major Income Earner Employed:</b>								
Yes	N 30	5	37	72	51	23	386	460
	% 41.7	6.9	51.4		11.1	5.0	83.9	
No	N 5	1	18	24	7	8	24	39
	% 20.8	4.2	75.0	17.9	20.5	61.5		
<b>Mother's Labor Force Status:</b>								
Fulltime	N 6	2	11	19	32	18	206	256
	% 31.7	3.4	57.9	12.5	7.0	80.5		
Parttime	N 6	2	10	18	7	3	53	63
	% 33.3	11.1	55.6	11.1	4.8	84.1		
Unemployed	N 9	0	11	20	6	6	29	41
	% 45.0	0.0	55.0	14.6	14.6	70.8		
Other	N 14	2	23	39	13	4	122	139
	% 35.9	5.1	59.0	9.4	2.9	87.7		
<b>Receive Public Assistance:</b>								
Yes	N 10	1	23	34	9	6	366	381
	% 29.4	2.9	67.7	2.4	1.6	96.0		
No	N 25	5	32	62	49	25	44	118
	% 40.2	8.1	51.7	41.5	21.2	37.3		

work force to evaluate the influences of nonreported incomes.

Women in financial need were estimated in the following manner. Percent of poverty levels were first computed using the Office of Management and Budget's 1986 guidelines, which established poverty as \$5,640 per household of one person and adding \$1,880 for each additional family member. Cross-tabulation of the percent of poverty and method of payment reported by respondents was performed. Financial need was then defined as those women living below 185% of poverty, without other sources of payment for prenatal care, yet without Medicaid reimbursement. The distribution of self-pay women in comparison to other respondents is displayed in Table 1.

For each county, projections were made by calculating the percentage of self-pay women in financial need for each county. Only respondents reporting incomes (N = 597) were utilized in this determination. Estimates of women in need were then computed as the product of the financial need percentage and the population estimates. For those

counties without respondents or for which all respondents either reported or failed to report income, the overall percentage for the state was used to project need. To account for variations in projections attributable to bias or error, 85% confidence intervals were computed using the procedure detailed by Fleiss.<sup>10</sup> Estimates of the number of childbearing women (ie, women 15 to 44 years of age) were acquired from the Maternal and Child Health Service of the Oklahoma State Department of Health. Estimated births were computed by multiplying the number of births registered in June, July, and August of 1986 by four.

## RESULTS

Results of this evaluation were derived from questionnaires returned from 93 of 94 (97.8%) facilities currently providing licensed obstetrical services. Responses were obtained not only from licensed state facilities, but also from three of the four facilities operated through the Oklahoma region of the United States Indian Health Service. Military installations, which represented the sites of almost

Table 6. Listings of the estimated number of childbearing women (aged 15 to 44), live births, and estimated self-pay women in financial need for each Oklahoma county for 1987

County	Group	Pop Est	Need Estimates		
			Mean	Max	Min
Adair	Women	4,650	1,330	1,374	1,286
	Births	306	87	99	76
Alfalfa	Women	1,190	144	161	129
	Births	108	13	18	8
Atoka	Women	2,750	335	360	311
	Births	240	29	37	22
Beaver	Women	1,670	203	223	184
	Births	102	12	17	8
Beckham	Women	4,910	599	632	565
	Births	450	55	65	45
Blaine	Women	3,090	515	545	486
	Births	210	35	42	28
Bryan	Women	7,060	861	901	822
	Births	624	76	88	64
Caddo	Women	7,760	2,824	2,885	2,764
	Births	504	183	199	168
Canadian	Women	19,020	1,179	1,131	1,227
	Births	1,092	68	79	56
Carter	Women	10,400	1,269	1,317	1,221
	Births	972	118	133	104
Cherokee	Women	8,350	1,853	1,908	1,799
	Births	480	106	120	93
Choctaw	Women	3,530	430	459	403
	Births	234	28	36	21
Cimarron	Women	820	100	113	87
	Births	78	10	14	5
Cleveland	Women	48,790	5,903	6,007	5,799
	Births	2,490	301	325	278
Coal	Women	1,190	145	161	129
	Births	102	12	17	7
Comanche	Women	31,630	2,040	2,087	1,962
	Births	2,706	173	191	155
Cotton	Women	1,470	179	197	161
	Births	114	14	19	9
Craig	Women	3,080	376	402	350
	Births	150	18	24	12
Creek	Women	17,110	1,899	1,958	1,840
	Births	984	109	123	95
Custer	Women	7,720	1,103	1,148	1,060
	Births	468	67	78	56
Delaware	Women	5,780	1,578	1,627	1,529
	Births	372	101	114	89
Dewey	Women	1,230	150	167	133
	Births	120	15	20	9
Ellis	Women	1,260	154	170	137
	Births	54	7	10	3
Garfield	Women	15,520	931	973	889
	Births	798	48	57	38
Garvin	Women	6,220	759	796	722
	Births	492	60	70	50
Grady	Women	11,040	4,736	4,811	4,661
	Births	588	252	269	235
Grant	Women	1,130	138	154	122
	Births	66	8	12	4
Greer	Women	1,200	146	163	130
	Births	84	10	15	5

(continued)



one-tenth of the 1985 live births, were excluded from the survey.

During the designated seven-day survey period, 797 respondent questionnaires were obtained for 870 live births yielding an overall response rate of 91.6%. Of those missing, 3.2% (23) represented identified refusals while the remaining 6.2% (50) were otherwise unaccountable.

**Sample Representativeness.** Maternal age, education, and race distributions were not significantly different between survey respondents and vital registration data. However, respondents differed significantly from both 1985 ( $X^2 = 26.0$ ,  $p < 0.005$ ) and the June-July 1986 ( $X^2 = 15.2$ ,  $p < 0.005$ ) vital registration data for trimester in which prenatal care was initiated (Table 1). The respondent distribution differed significantly from both the 1985 ( $X^2 = 63.52$ ,  $p < 0.005$ ) and June-July, 1986 ( $X^2 = 42.55$ ,  $p < 0.005$ ) birth registrations for the numbers of prenatal visits (Table 1). These differences were primarily explained by the decreased proportion of women reporting no care and the absence of unknown values among respondents.

Respondents who reported or did not report income were significantly different with respect to age, race, and education (Table 2). Mothers under 25 years of age, of whom 30% were less than 19 years old, were over-represented among missing income values. The propensity for younger mothers to be among income nonrespondents was paralleled by the increased proportion of mothers with less than nine years of education not reporting income. Black mothers were 1.5 times less likely to report income compared to other racial groups.

The method of prenatal care payment differed significantly ( $X^2 = 49.05$ ,  $p < 0.005$ ; Table 3) among respondents reporting and those not reporting income. *Less than 40% of respondents not reporting income reported third party payment sources*, while 60% of respondents with known incomes reported third party payments. Among women *not reporting income*, 20% paid for prenatal care services through personal savings or other sources, 3.3% were unable to pay, and 5.3% received no prenatal care. Conversely, among respondents reporting income, 16.4% paid using personal savings, 2.6% were unable to pay, and 1.5% claimed to receive no prenatal care. Income nonrespondents differed significantly ( $X^2 = 24.06$ ,  $p < 0.005$ ) from income respondents when comparing labor force status, with income respondents being 1.8 times more likely to report full-time employment.

Median income among those not considered in financial need was \$18,000. Women in financial need reported median incomes of \$9,000; all reported incomes of less than \$15,000 annually. Twenty-seven percent of women not in need reported incomes of less than \$15,000 per year. Twenty-four percent of insured women reported annual incomes between \$15,000 and \$24,000 with incomes above \$45,000 reported by 11% of these women.

**Need Descriptions.** Age group distributions (Table 4) differed significantly ( $X^2 = 68.2$ ,  $p < 0.001$ ) between women classified as in need and those not. Insured women averaged 26.2 years of age, with 34% between the ages of 20 and 29 years. Self-pay women in financial need averaged 23.3 years of age, with 68% being between 20 and 29 years. No woman within the insured group was less than 15 years old as compared to 2.1% of the financially needy. Women 35 years or older were 1.75 times more frequent among the insured as compared to self-pay women.

Fifty percent of insured women had received at least one year of education beyond high school. Only 8.2% of self-pay women obtained any collegiate education, and 10.3% failed to complete high school. The differences between the distributions of educational attainment were statistically significant ( $X^2 = 100.4$ ,  $p < 0.005$ ). Greater educational attainment was achieved among black self-pay

## **Self-pay women in financial need were significantly less likely to begin prenatal care during early pregnancy as compared to insured women.**

women as compared to white self-pay women. Sixty-five percent of black self-pay respondents completed high school as compared to 53.9% of white self-pay respondents. Educational attainment among black and white respondents not in financial need demonstrated no statistical differences. Conversely, American Indian respondents not considered in need were less educated than either

Table 6. Listings of the estimated number of childbearing women (aged 15 to 44), live births, and estimated self-pay women in financial need for each Oklahoma county for 1987 (cont)

County	Group	Pop Est	Need Estimates			County	Group	Pop Est	Need Estimates		
			Mean	Max	Min				Mean	Max	Min
Harmon	Women	850	104	117	90	Love	Women	1,750	213	233	194
	Births	30	4	6	1		Births	66	8	12	4
Harper	Women	890	109	123	95	McClain	Women	6,130	748	785	710
	Births	36	4	7	1		Births	330	40	49	32
Haskell	Women	2,470	301	325	278	McCurtain	Women	8,580	1,045	1,090	1,003
	Births	108	13	18	8		Births	588	72	83	60
Hughes	Women	2,860	349	374	324	McIntosh	Women	3,260	398	425	371
	Births	186	23	29	16		Births	174	21	27	15
Jackson	Women	7,840	1,960	2,015	1,905	Major	Women	1,960	239	260	218
	Births	780	195	212	177		Births	144	11	23	12
Jefferson	Women	1,710	209	228	189	Marshall	Women	2,190	267	289	245
	Births	102	12	17	7		Births	192	23	30	17
Johnston	Women	2,430	296	320	273	Mayes	Women	8,030	2,409	2,468	2,350
	Births	108	13	18	8		Births	528	158	173	143
Kay	Women	11,290	1,377	1,427	1,327	Murray	Women	2,830	345	370	320
	Births	492	60	70	50		Births	234	29	36	21
Kingfisher	Women	3,620	442	470	413	Muskogee	Women	15,880	3,970	4,049	3,891
	Births	156	19	25	13		Births	1,026	257	276	237
Kiowa	Women	2,470	301	325	278	Noble	Women	2,540	310	334	286
	Births	174	21	27	15		Births	198	24	31	17
Latimer	Women	2,290	279	302	257	Nowata	Women	2,410	294	317	271
	Births	108	13	18	8		Births	120	15	20	10
LeFlore	Women	9,760	1,191	1,237	1,144	Okfuskee	Women	2,320	1,160	1,195	1,125
	Births	492	60	70	50		Births	180	90	100	80
Lincoln	Women	7,010	1,002	1,004	960	Oklahoma	Women	161,760	18,602	18,787	18,418
	Births	450	64	75	54		Births	11,628	1,337	1,387	1,288
Logan	Women	7,610	928	969	887	Okmulgee	Women	8,720	4,360	4,427	4,293
	Births	504	61	70	51		Births	534	267	284	250

(continued)

insured black ( $X^2 = 5.05$ ,  $p = 0.282$ ) or white ( $X^2 = 13.16$ ,  $p = 0.011$ ) respondents.

Self-pay women in financial need were significantly ( $X^2 = 41.5$ ,  $p < 0.005$ ) less likely to begin prenatal care during early pregnancy as compared to insured women (Table 4). Prenatal care was initiated within the first trimester by 85% of insured women versus only 60% of self-pay women. Eighty-three percent of insured first trimester entrants reported no difficulties in paying for service as compared to 60% of self-pay women.

Racial distributions among self-pay and insured respondents for trimester prenatal care began and the total number of prenatal visits were significantly different ( $X^2 = 32.99$ ,  $p < 0.005$  and  $X^2 = 19.32$ ,  $p < 0.005$ , respectively). Insured black respondents did not initiate first trimester prenatal care as frequently as did other racial groups; white respondents generally obtained more prenatal care visits while American Indians obtained less.

Self-pay women differed significantly ( $X^2 = 50.5$ ,  $p < 0.005$ ) from insured women on the basis of work force status (Table 5). Sixty-four percent of insured women reported at least part-time employment as compared to 38% among self-pay women. Employment status of the major income earner and inclusion of public assistance differed significantly (Table 5;  $X^2 = 54.5$  and  $100.1$  respectively,  $p < 0.005$ ). Major income earners among self-pay women had an unemployment rate of 24.7% as compared to 7.8% among those insured. Twenty-four percent of insured respondents reported incomes which included assistance, compared to 35% of self-pay women.

**Estimates.** The proportion of self-pay women in financial need was 12.2% (85% confidence interval 2.2% to 20.0%). Applying this percentage to the 1987 estimated population of childbearing women (ie, 816,490) resulted in an estimated 99,610 childbearing age women in financial need. In 1987 approximately 52,070 infants were born; 6,352 of those were born into families requiring some form of financial support to acquire adequate prenatal care. The greatest proportion of these women resided in Okfuskee (50%) and Tillman (66.7%) counties. The estimated number of childbearing age women and live births for each Oklahoma county are tabulated in Table 6.

## DISCUSSION

Self-pay women in financial need were determined to be a unique group when compared to women with

some form of third party payments. Financially needy were, in general, younger, less educated, unemployed women of whom 16% were black and 5% were American Indian. The ability to pay for services significantly affected both prenatal care initiation and visitation. Only 60.4% of self-pay women considered in financial need began care during their first trimester of pregnancy as compared to 85% among insured women. Similarly, 81.3% of insured women obtained adequate numbers of prenatal care visits as compared to 64.6% of self-pay women. Financial need restricted women in achieving adequate levels of prenatal care, as defined by the

## Financial need among self-pay women was disproportionately located within Oklahoma and Tulsa counties.

American College of Obstetricians and Gynecologists, by limiting both first trimester enrollment and visitation compliance.

Projections derived through this survey indicated that for 1987, 99,610 women of childbearing age would be below 185% of federal poverty levels and without some form of third party reimbursement. From this group, approximately 6,352 infants would be born. Of these women, 2,514 would initiate late prenatal care, and 2,298 would not obtain the recommended number of prenatal care visits. While a portion of those women not obtaining the recommended number of prenatal visits may be attributed to premature deliveries, economic hardship remains critical in obtaining adequate prenatal care.<sup>12</sup>

The excellent return rate achieved in this assessment lends credence to these findings. Demographic characteristics of respondents mimicked those obtained from state vital registrations. Any demographic differences can be attributed to distributions of missing values. For example, 2.8% of vital registrations failed to report months in which prenatal care began, as compared to none within this survey.

Projections presented within this report should be considered conservative. Twenty-five percent of respondents did not report annual family income.



Table 6. Listings of the estimated number of childbearing women (aged 15 to 44), live births, and estimated self-pay women in financial need for each Oklahoma county for 1987 (cont)

County	Group	Pop Est	Need Estimates		
			Mean	Max	Min
Osage	Women	9,730	1,216	1,263	1,169
	Births	534	67	78	56
Ottawa	Women	7,890	1,318	1,365	1,270
	Births	432	72	83	61
Pawnee	Women	3,850	470	499	440
	Births	168	20	27	14
Payne	Women	19,420	2,369	2,435	2,304
	Births	846	103	117	89
Pittsburg	Women	8,930	1,982	2,039	1,926
	Births	624	139	153	124
Pontotoc	Women	8,080	1,632	1,684	1,580
	Births	468	95	107	82
Pottawatomie	Women	15,260	1,801	1,858	1,743
	Births	972	115	129	100
Pushmataha	Women	2,630	321	345	297
	Births	192	23	30	16
Roger Mills	Women	1,270	155	172	131
	Births	78	9	14	4
Rogers	Women	14,730	2,681	2,748	2,613
	Births	930	169	186	152
Seminole	Women	6,630	809	847	770
	Births	384	47	56	38
Sequoyah	Women	8,310	1,388	1,437	1,339
	Births	300	50	59	41
Stephens	Women	10,040	442	471	412
	Births	618	27	35	20
Texas	Women	4,440	542	473	510
	Births	252	31	38	23
Tillman	Women	2,460	300	323	277
	Births	204	25	32	18
Tulsa	Women	135,720	14,793	14,959	14,628
	Births	8,388	914	955	873
Wagoner	Women	13,830	1,978	2,036	1,918
	Births	582	83	95	71
Washington	Women	11,120	1,968	2,026	1,910
	Births	768	135	151	121
Washita	Women	3,300	1,320	1,361	1,279
	Births	186	74	84	64
Woods	Women	2,110	257	279	236
	Births	114	14	19	9
Woodward	Women	5,710	1,884	1,935	1,933
	Births	252	83	94	72

Income nonrespondents were primarily young with less than nine years of education and no outside sources of prenatal care payment. Both black and American Indian women were over-represented among income nonrespondents. These characteristics, which have traditionally been associated with lower economic potential, indicate income nonrespondents ally more aptly to financially needy women.

Financial need among self-pay women was

disproportionately located within Oklahoma and Tulsa counties. These counties contained 21% of the state's 1987 estimated childbearing age women, yet had 41% of self-pay women in need. Self-pay women in financial need were, however, distributed throughout the state. Caddo, Tillman, and Washita counties had 40% or more of self-pay women in financial need, while Stephens and Ottawa had less than 5%.

Consequently, efforts to improve access to and

availability of publicly supported prenatal care for women must be expanded. While outreach, educational, and social support programs are essential, funding is also required to provide appropriate prenatal health care services for women ineligible for public assistance and who cannot afford to pay.



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# An Atypical Myofibroblastic Tumor of the Bladder Resembling a Sarcoma

John B. Forrest, MD; Gregory S. King, MD; Gregory R. Pittman, MD

*A case of an unusual pseudosarcoma of the bladder wall is described. Ultrastructurally the tumor demonstrates myofibroblastic differentiation similar to that of reactive soft tissue lesions such as nodular fasciitis and proliferative myositis. Criteria for distinguishing this lesion from a sarcoma are reviewed. The management of this tumor is discussed.*

**R**eactive spindle cell lesions of soft tissue such as nodular fasciitis, proliferative fasciitis, and proliferative myositis are "pseudosarcomas" familiar to most pathologists. This case report describes a lesion of the bladder of apparent similar lineage not associated with prior surgery or trauma to the bladder wall. Both clinically and on initial pathologic examination, the tumor had many worrisome features. A possible relationship of this lesion to the other proliferative lesions of soft tissue is discussed.

## CASE REPORT

BJ, a 42-year-old woman, presented with acute onset of severe suprapubic pain. Physical findings were within normal limits except for suprapubic tenderness. Past medical history was noncontributory. Urinalysis revealed microscopic hematuria. Cystoscopic examination demonstrated a 2.5 × 2.5 cm.

mulberrylike tumor of the dome of the urinary bladder. Following transurethral resection of the tumor, initial microscopic study revealed hyperplastic urothelium with underlying edema, chronic inflammation, and eosinophilia in addition to necrotic smooth muscle fibers. Grossly, the tumor bore some characteristics of a leiomyoma or a leiomyosarcoma. However, due to the size of the lesion and the nondiagnostic results of microscopy, a partial cystectomy was performed with margins of 2.5 cm circumferentially around the base of the tumor mass. The patient's postoperative course was complicated by an episode of deep vein thrombosis which responded to anticoagulant therapy. The suprapubic discomfort disappeared postoperatively and cystoscopy every three months for two and one half years postoperatively has revealed no evidence of recurrent disease.

Grossly, the resected specimen demonstrated a polypoid mucosal surface with a central ulceration surrounded by a rim of normal-appearing bladder mucosa. Cross sections of the specimen revealed an ill-defined, yellow-white nodular mass replacing nearly the entire thickness of the bladder wall. Histologically, the tumor consisted of loosely spaced, large spindle-shaped cells demonstrating large nuclei with prominent nucleoli (Fig 1). Mitoses were rare (less than 0.5/10 hpf) and no atypical mitotic forms were identified. The cytoplasm appeared eosinophilic and contained longitudinal striations on trichrome staining. The surrounding matrix appeared myxoid and edematous. Peripherally, the tumor appeared to be destroying bundles of smooth

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muscle with adjacent eosinophilic and foreign body giant cell infiltration. The depth of invasion was through the entire muscular wall of the bladder. Ultrastructural examination revealed bipolar spindle cells demonstrating large ovoid nuclei with abundant euchromatin and prominent nucleoli (Fig 2). The cytoplasm contained an abundance of rough endoplasmic reticulum in addition to longitudinal filaments demonstrating focal condensation (Fig 3). Pinocytotic vesicles and occasional junctional complexes were evident. Intracytoplasmic collagen fibers were present in some of the spindle cells (Fig 3).

## DISCUSSION

The reactive myofibroblasts present in the above described lesion are reminiscent of those found in soft tissue lesions such as nodular fasciitis, proliferative fasciitis, and proliferative myositis. These reactive conditions may demonstrate considerable mitotic activity and cellularity although atypical mitotic figures usually are not present. A few cases of similar lesions have been previously described in the genitourinary tract and given the labels of postoperative spindle cell nodules. These were believed to resemble carcinomas,<sup>1</sup> atypical fibromyoid myxoid tumors,<sup>2</sup> and pseudosarcomas. The largest series describes eight cases, four of which represented vaginal lesions. Three cases represented urethral lesions and one case a bladder lesion.<sup>1</sup> Six of the eight patients were initially thought to have sarcomas. However, after incomplete excision, the clinical follow-up was unremarkable with no evidence of malignancy. A case report of a similar appearing lesion of the prostate has also been described with no evidence of recurrent tumor after one-and-one-half years of follow-up.

The gross findings in this case were suggestive of malignancy with the gross findings of central ulcerations, polypoid thickening of the bladder wall, and deep penetration of the tumor into the bladder structure. On histologic examination, the presence of plump, atypical fibroblasts with apparent destruction and deep invasion of the bladder wall was worrisome. However, the low mitotic rate, absence of atypical mitotic forms, and loose cellularity with interlacing bundles of large spindle-shaped cells favored a reactive process similar to proliferative myositis in soft tissues. It seems likely that the process present in the bladder wall of this case is analogous to that of nodular fasciitis or proliferative myositis of soft tissue. While such lesions may be

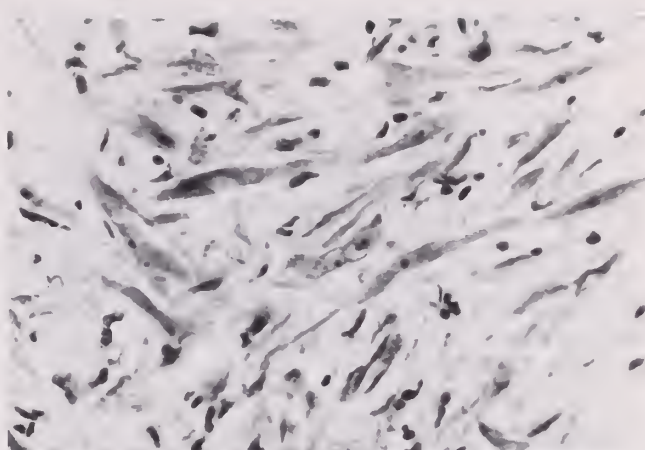


Figure 1. Large primitive-appearing spindle cells with prominent nucleoli in a loose myxoid stroma. (H & E  $\times$  200)

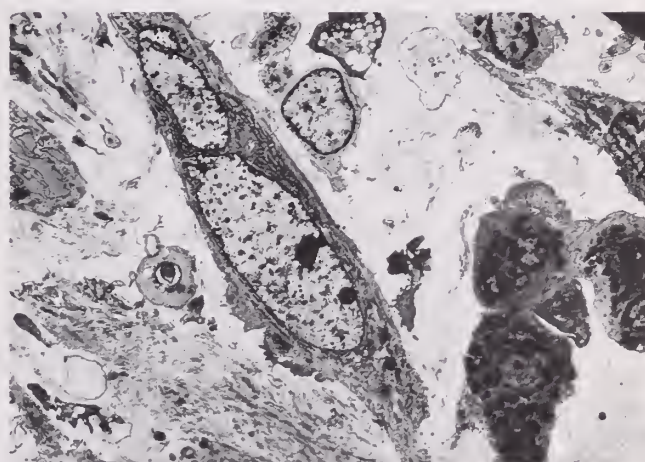


Figure 2. Electron micrograph showing large spindle cell in a myxoid background. The spindle cell has abundant rough endoplasmic reticulum. Note three eosinophils in the lower right corner. ( $\times$  12,000)

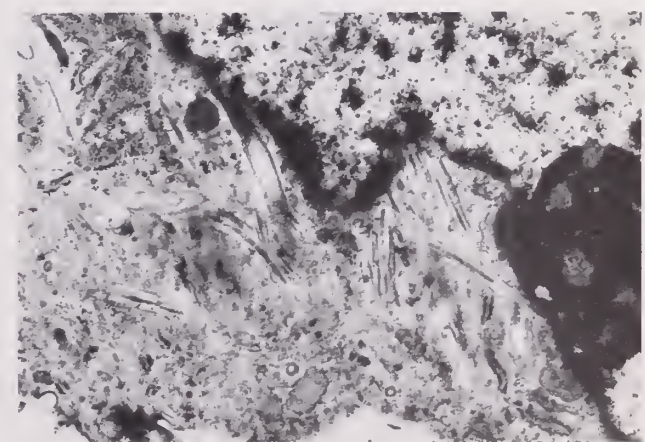



Figure 3. Note longitudinal filaments with focal dense condensations and intracytoplasmic collagen fibers. These ultrastructural findings are consistent with myofibroblast differentiation. ( $\times$  80,000)

associated with bladder trauma, the majority are not associated with prior surgical trauma.<sup>3</sup> These atypical myofibroblastic tumors should be differentiated from bladder wall sarcomas in order to support a more conservative approach to therapy with local resection and close follow-up. Follow-up cystoscopic examination is recommended even in these cases of genitourinary lesions with an expected low local recurrence rate. 

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### Coming in May . . .

Manuscripts being considered for publication in May include a study of lymphoscintigraphy in the management of patients with cutaneous melanoma and a report on the early diagnosis of acoustic neuroma.

Also under consideration is a paper dealing with sudden infant death syndrome and its four-time occurrence in one family.



## Tuberculosis and the Elderly

Although tuberculosis rates have declined dramatically over the last several decades, tuberculosis continues to be a cause of morbidity and mortality. In Oklahoma in 1986, 267 new cases were reported, while 250 TB cases were reported in 1987.

The case rate by age continues to reflect the high rate of disease among the elderly population. The age group 65 years and older accounts for the largest population with TB, at a rate of 26.6 cases per 100,000 population in 1986. In 1987, 41.2% of all TB patients were 65 years of age and older. The second largest age group, 45 to 64 years of age, has a rate of 14.8 cases per 100,000 population. The two groups combined account for almost three-quarters of all TB cases in Oklahoma.

Seven percent of the TB cases in 1986 occurred

in residents or staff of nursing homes. Sixteen of those persons were 65 years of age or older.

Since the elderly have had more opportunity over the years to develop a primary infection, they are at high risk for active disease when debilitating diseases and an impaired immune system occur. Infectious disease experts expect less communicable disease in young people today because more aggressive case control methods and preventive therapy are being used. Credit must also be given to the vigilance of the medical profession and to better socioeconomic conditions.

Awareness of these TB rates in the elderly should increase the level of suspicion in the differential diagnosis of illness in this rapidly increasing segment of the population.

DISEASE	January 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	1	0
CAMPYLOBACTER INFECTIONS	6	6	5	9
ENCEPHALITIS, INFECTIOUS	0	0	0	0
GIARDIA INFECTIONS	3	3	8	10
GONORRHEA (Use ODH Form 228)	479	479	865	1040
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	13	13	6	10
HEPATITIS A	11	11	10	20
HEPATITIS B	2	2	4	7
HEPATITIS, NON-A NON-B	0	0	0	0
HEPATITIS UNSPECIFIED	2	2	1	5
MEASLES (RUBEOLA)	0	0	0	0
MENINGITIS, ASEPTIC	2	2	1	3
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	1	1	2	3
MENINGOCOCCAL INFECTIONS	0	0	4	2
PERTUSSIS	0	0	0	0
RABIES (Animal)	3	3	2	4
ROCKY MOUNTAIN SPOTTED FEVER	0	0	0	0
RUBELLA	0	0	0	0
SALMONELLA INFECTIONS	10	10	9	16
SHIGELLA INFECTIONS	2	2	12	8
SYPHILIS (Use ODH Form 228)	13	13	14	11
TETANUS	0	0	0	0
TUBERCULOSIS	7	7	8	15
TULAREMIA	0	0	1	0
TYPHOID FEVER	0	0	0	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	11
BRUCELLOSIS	0
LEGIONNAIRES DISEASE	0
MALARIA	2
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	0



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# Pathogenesis of HIV Infections

Siddhartha Mahanty, MBBS, and Douglas P. Fine, MD

**T**his and the following article in this series of papers concerning human immunodeficiency virus (HIV) address pathogenetic mechanisms involved in infection with the agent and the resultant spectrum of clinical features. The current article confines itself to the pathophysiology of HIV infections.

HIV is an RNA retrovirus that shares many features with other members of the nontransforming and cytopathic lentivirus family of retroviruses. HIV infection is spread by sexual contact, by infected blood or blood products, and perinatally from mother to fetus. Once inside the host, HIV displays selective tropism for certain cells of the immune system and the central nervous system. Most of the clinical features of HIV infections can be attributed to the resultant immunosuppression and neuropsychiatric abnormalities.

The critical basis for the pathogenesis of HIV infection is depletion of the helper/inducer subset of T lymphocytes (T4 cells), which express the CD4 phenotype marker. This depletion of T4 cells results in severe immunosuppression. HIV selectively infects the T4 cell, and a convincing body of evidence suggests that the CD4 molecule is the high affinity receptor for the virus. After HIV binds to the CD4 molecule, it is internalized and uncoated. Subsequently, genomic viral RNA is transcribed into DNA by the viral enzyme reverse transcriptase, and this proviral DNA is integrated into host

chromosomal DNA. After integration the virus may assume a latent phase until the cell is activated, for example, by an appropriate antigenic stimulus.

HIV infection of lymphocytes results in decreased numbers and functional defects. The decrease in numbers is the consequence of two processes — direct cell lysis and abnormalities of lymphokine secretion. Several mechanisms have been proposed for the direct cytopathic effects of HIV. These include accumulation of unintegrated viral DNA, an

**Neurological abnormalities are commonly seen in individuals with HIV infections, affecting at least 60% of patients with AIDS.**

increase in cell permeability due to budding and release of new viral particles, and induction of terminal differentiation of T4 cells. Recent evidence has indicated that the level of expression of CD4 molecules on the cell surface may play an important role in the ability of HIV to produce a cytopathic effect. Subsets of macrophages and monocytes that express CD4 at much lower levels than T4 cells can be infected without lysis. Cell fusion leading to multinucleated giant cells (syncytia) is another

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potentially important mechanism of cell death, at least in vitro.

Cell lysis alone is unlikely to account completely for the profound depletion of lymphocytes, since a very small percentage of circulating T4 cells (1 in  $10^5$  cells) express viral proteins, a marker of HIV replication. Qualitative or functional defects such as inhibition of interleukin (IL)-2 secretion by T4 cells, secretion of cytotoxic factors like lymphotoxins, and decreased ability to recognize and respond to soluble antigens undoubtedly contribute to the overall decline in lymphocyte numbers.

Apart from T4 cells, other cells that express CD4 become targets for HIV invasion. Certain subsets of monocytes which express CD4 molecules at low density have recently been demonstrated to be infected with HIV. In the brain, the major cell type infected appears to be the monocyte/macrophage and this may play an important role in the development of neuropsychiatric abnormalities commonly seen in HIV infections. Infection of pulmonary alveolar macrophages may be important in the pathogenesis of interstitial pneumonitis. Evidence from recent work is supporting the concept that monocytes and macrophages play a major role in propagation and pathogenesis of HIV infections since HIV appears to lack the ability to produce cytopathic effect on these cells.

In addition to the direct effect of cellular invasion by HIV, significant derangement of B lymphocyte function, manifested by polyclonal activation, hypergammaglobulinemia, circulating immune complexes, and autoantibodies, are also common in patients with HIV infections. Although certain T cell-dependent B cell responses may be abnormal

due to helper function defects, there are clearly abnormalities at the B cell level, such as inability to mount an adequate IgM response to antigenic challenge. The high incidence of concurrent Epstein-Barr virus and cytomegalovirus infections in these patients has been implicated in the phenomenon of polyclonal B cell activation.

Finally, neurological abnormalities are commonly seen in individuals with HIV infections, affecting at least 60% of patients with AIDS. At least three currently recognized potential pathogenic mechanisms can explain neuropsychiatric manifestations — monocyte/macrophage-induced pathogenic effects as described above, direct invasion of neural tissue, and inhibition of neuroleukin due to partial sequence homology between the envelope protein gp120 and neuroleukin, a nerve growth factor.

The consequences of the pathogenic processes described above are a constellation of immunologic and neurologic abnormalities which will be the subject of the next article. Knowledge of the pathogenic mechanisms operating at the cellular level contributed greatly to our understanding of the spectrum of clinical syndromes which are associated with HIV infection.

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**May 1**  
**is the closing date for the June Journal.**  
**All news and advertising material for the June issue**  
**must be in the editorial office by that day.**



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# **82nd Annual Meeting Oklahoma State Medical Association May 5-7, 1988**

**Shangri-La Resort, Afton, Oklahoma**

## **Thursday, May 5**

Noon-6:30 PM  
11:30 AM-1:30 PM  
1:30 PM-5 PM  
6:30 PM-Midnight

Registration Open\*  
OSMA Executive Committee (lunch)  
OSMA Board of Trustees  
Oklahoma University Medical School  
Alumni Reception and Dinner/Dance  
Guest Speaker: Former Governor George Nigh

## **Friday, May 6**

7:15 AM-5 PM  
9 AM-10:30 AM  
  
10:30 AM-Noon  
10:30 AM-Noon  
Noon-1:30 PM  
  
1:30 PM-4 PM  
6 PM-Midnight

Registration Open  
OSMA House of Delegates  
Opening Session  
  
OSMA Reference Committees  
AIDS Panel Discussion  
OSMA Keynote Luncheon  
Guest speaker to be announced  
Scientific Program  
OSMA Reception and Annual Dinner/Dance  
Guest Speaker: Humorist Robert Henry  
from Auburn, Alabama

## **Saturday, May 7**

7:15 AM-Noon  
7:30 AM-8:30 AM  
9 AM-11 AM  
  
11:30 AM-1 PM  
1 PM-4 PM

Registration Open  
OSMA Past Presidents Breakfast  
OSMA House of Delegates  
Closing Session  
"Come and Go" Buffet Luncheon  
PLICO Loss Prevention Seminar

\*All meetings or events will be held in the Shangri-La Conference Center unless otherwise noted.

## Routine preop screening for HIV unwarranted

Routine preoperative human immunodeficiency virus (HIV) screening of low-risk patients is not warranted by the infection risk faced by surgical personnel, a recent report concludes.

Michael D. Hagen, MD, of Tufts University School of Medicine, Boston, and colleagues conclude that this risk is low and can be effectively dealt with

by barrier precautions. However, routine preoperative HIV screening "could be even more socially destructive than a program to screen the general population; privacy will certainly be more extensively compromised and the specificity of serological tests may be somewhat lower, potentially giving rise to many false-positive results."

The HIV infection risk to surgeons, operating room nurses, and technicians is of the same order of magnitude as the risk to an uninfected person involved in "safer" sexual contact (eg, using a condom), even if the patient or the sexual partner is known to carry HIV, the authors say. They base this on an analysis of the frequency with which inadvertent skin punctures with a needle or scalpel used on an infected patient occur in the operating room and the associated viral transmission rate.

While the actual skin penetration rate sustained by surgeons isn't known, studies suggest the rate of

(continued)

### Trustees meet in February

## Nineteen get nod of approval for Life Membership in OSMA

Nineteen Oklahoma physicians were named Life Members of the Oklahoma State Medical Association at the February 7 meeting of the OSMA Board of Trustees.

The new Life Members from Oklahoma City are James S. Cox, MD; Nancy R. Craig, MD; Phyllis E. Jones, MD; Neil B. Kimerer, MD; William S. Pugsley, MD; and Elmer Ridgeway, MD.

Named from Tulsa were Maurice C. Fuquay, MD, and Gene Harrison, MD, and from Altus, James H. Holman, MD, and John W. Walker, MD.

From Bartlesville, the new Life Members are Carl H. Guild, MD, and William J. Russum, MD.

Also named were Martin B. LeBeck, MD, Jenks; George C. dos Santos, MD, Henryetta; Beryl D. Henwood, MD, Collinsville; Wesley T. Manning, MD, Pawhuska; Elnora G. Miller, MD, Stillwater; Hobart C. Sanders, MD, Boley; and Henry D. Wolfe, MD, Hugo.

To be eligible for a Life Membership, an OSMA member must meet one or more of the following qualifications: (1) Be retired from the active practice of medicine due to age or ill health; (2) Be engaged in the active practice of medicine for fifty years or more; (3) Be seventy years of age or older.



**AMA Speaker of the House** John L. Clowe, MD (center), visits with OSMA officers President-Elect Ray V. McIntyre, MD (left), and President M. Joe Crosthwait, MD, in Oklahoma City. Dr Clowe was in the city February 29 for the launching of OSMA's Very Important Patient (VIP) program in Oklahoma County.



# 82nd OSMA Annual Meeting

## Shangri-La Resort

### Social Events and Ticket Information

#### Oklahoma University Medical School Alumni Dinner/Dance

Reception and Dinner/Dance — Thursday, May 5th, 6:30 PM-Midnight

Special Guest Speaker: Honorable George Nigh

*Tickets \$40 per person*

#### OSMA Keynote Luncheon

Friday, May 6th, Noon-1:30 PM

Special Guest Speaker: To Be Announced

*Tickets \$16 per person*

#### OSMA President's Inaugural Dinner/Dance

Reception and Dinner/Dance — Friday, May 6th, 6 PM-Midnight

Special Guest Speaker: Robert Henry, Auburn, Alabama

Mr. Henry is a humorist for all reasons . . . a holder of the CPAE, the highest award for professional speaking given by the National Speakers Association . . . a past president of the National Speakers Association . . . and a published author of humorous material.

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#### "Come & Go" Luncheon

A deli-sandwich buffet — Saturday, May 7th, 11:30 AM-1PM

Before you head home . . . to the golf course . . . to your favorite fishing spot . . . or before the afternoon's PLICO Loss Prevention Seminar, stop by the deli buffet and fix yourself a sandwich heaped with meat, cheese, and all the other appropriate "goodies" to go on it and with it.

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NOTE: Your tickets will be held at the OSMA convention registration desk to be picked up when you arrive at Shangri-La.

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## Spectacular cases

# Patient paramount when doctor in spotlight

Doctors dealing with reporters in cases attracting broad news media attention must remember that the patient and his or her family is paramount and accuracy "non-negotiable," concludes a report from William C. DeVries, MD, of the Humana Heart Institute International, Louisville, Ky.

News media interest in a "spectacular" case — "especially one where the medical research is funded by a publicly supported government agency" — presents physician-researchers with dilemmas unknown to doctors of past generations, says Dr DeVries. "The question, I submit, is no longer whether physicians will cooperate with the press, but

when, how, and to what degree they will cooperate."

On balance, cooperating with reporters seeking details of a newsworthy medical case "is more advantageous to everyone concerned than taking the opposite track," says DeVries, who dealt extensively with the news media during four artificial heart implant cases. Still, such situations present physicians with conflicting obligations to their patient, the medical profession, and the public, he says.

In addition to concerns about patient privacy — where the public's right to know ends and the rights of a suffering patient begin — physicians involved in such a case must be concerned about how news

(continued)

## Routine screening (continued)

surgical glove punctures to be about 12% per glove. The authors use this and other estimates to suggest a significant skin puncture occurs in 1 in 40 surgical cases. Citing studies indicating HIV infection risk after skin puncture with infective materials is low, the authors estimate a surgeon's HIV infection risk when operating on an infected patient at between about 1/130,000 and 1/4,500.

"If the risk were substantially higher than our estimates, surgeons and other health care providers working in institutions where HIV prevalence is very high should be at noticeable risk of infection. In fact, health care workers at San Francisco General Hospital (one such institution) . . . have incurred only one HIV seroconversion since December 1984," the authors say.

They compare this risk to that associated with heterosexual contact with an HIV-infected partner. Studies suggest this is about 1 in 1,000; use of a condom (assuming 90% effectiveness) cuts that to 1 in 10,000, they say.

Using a range of estimates of HIV prevalence in low-risk populations, they estimate a surgeon's risk of HIV infection when operating on a low-risk patient at no more than 1/450,000, and as little as 1 in 1.3 billion. By comparison, again using varying prevalence estimates, HIV risk through "safer sex" in a low-risk population ranges from 1/100,000 to 1/100,000,000, they figure. "Thus, the risks of HIV transmission per surgical patient and per heterosexual encounter appear to be of the same order of

magnitude. In other words, surgeons who use barrier precautions (such as gloves) have about the same risk of HIV infection as sexual participants who use barrier precautions (such as condoms)."

The risk must be balanced against the impact routine preoperative screening could have on low-risk populations — particularly the false-positive problem, say the authors. Estimates of the false-positive rate for joint HIV screening and confirming tests vary from less than 1/100,000 to 1/1,250, the authors say. But regardless of the estimates used, they argue that a significant number of low-risk patients would be falsely labeled as HIV-positive "to protect one surgeon."

These estimates apply to proposed screening of all preoperative patients, the authors note. Selective preoperative testing of moderate/high-risk groups "may make sense if identifying an infected patient can diminish the risk to health care workers without denying that patient necessary care," they write. But they raise confidentiality concerns about the use of such information.

"How many false-positive results are tolerable to protect one health care worker? What is the joint false-positive rate for HIV testing of hospitalized patients? How many patients should be denied adequate medical care to prevent one hospital-acquired infection? Until we can answer these difficult questions, we should not screen our low-risk patients," the authors conclude.

The report appeared in the March 4 issue of the *Journal of the American Medical Association*.



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## Patient paramount (continued)

media interest may actually affect patient treatment, as well as how news coverage may affect the integrity of investigation, hospital disruptions, and peer reactions, DeVries says.

Assuming that there is "a necessary symbiosis" in current relations between physicians and the news media, DeVries suggests three principles to be followed by both parties.

First, he says, "concern for the patient and family is paramount. It takes precedence over the public's right to know, because a human being is not public property." Secondly, DeVries maintains, "accuracy is non-negotiable. Neither the press nor the medical staff can be excused for the release of inaccurate information." And finally, he says, "advance preparation is essential. Before the spectacular medical event occurs, the hospital and researchers should develop a team to handle the logistics of reporting the news quickly and accurately."

The report appeared in the February 12 issue of the *Journal of the American Medical Association*.



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# Cat-scratch disease agent finally isolated

A bacteria believed to cause cat-scratch disease has been identified and cultured, according to a newly published report.

Although the disease is usually a benign infection of lymph glands, it may sometimes progress to a severe, systemic, or recurrent infection, say the authors Lt. Charles K. English, MSC, USN, Armed Forces Institute of Pathology and the Georgetown University School of Medicine, Washington, DC, and colleagues.

The lymph glands involved in mild infections are those that drain the skin, eyes, or other sites of the body that have received a cat scratch. More serious infections may result in encephalitis, hepatitis, arthritis, or inflammation of the spleen and other organs.

The authors believe the bacterium they have identified and cultured is the cause of cat-scratch disease (CDS) based on the following findings: the bacterium was isolated from patients with cat-scratch disease, but not from patients with other

diseases; it was morphologically identical to forms seen in human lesions; patients with recent infection had significantly elevated levels of antibodies to the bacteria in their blood; antibody to the isolated bacteria reacted with known CSD bacilli in human tissues; and it caused skin lesions in an animal model. These findings fulfill Koch's postulates for proving an infectious agent is the cause of a disease, the authors conclude.

The gram-negative bacterium occurs in two morphological forms, a normal vegetative form and a smaller variety with cell wall defects, the authors report. The vegetative form grows poorly or not at all at normal human body temperature. The wall-defective form can grow at this temperature and is believed by the authors to be involved in the more serious infections that affect internal organs, which are several degrees warmer than lymph nodes near the skin.

The report was published in the March 4 issue of the *Journal of the American Medical Association*. □



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# MEDICINE DAY

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**M**arch 9 was Medicine Day at the State Capitol, and physicians, spouses, and friends of medicine gathered from across the state for the annual event. Visitors registered on the fourth floor of the rotunda, spanned by an arch of red and white balloons, before attending the morning program in the House Chamber.

Medicine Day, a joint project of the Oklahoma State Medical Association and the OSMA Auxiliary, gives state physicians an opportunity to get acquainted with their legislators, learn, share ideas, and watch state government in action. The day's activities included a period for visiting legislative offices and a luncheon, served on the fifth floor rotunda.



Visitors included (above left) medical students Renetta Bullard, Sandra Chai, and Lana Oglesbee, current president of the OSMA Student Section. Also, (above) Dr Bill Dawson, Muskogee, and Dr Charles Womack, Oklahoma City.





(Top) OSMA President M. Joe Croughwait, MD, addresses visitors in the House Chamber at the State Capitol. Other speakers during the morning program were (above left) Oklahoma Governor Henry Bellmon and (above) OSMA Auxiliary President Julie Weedn.



Making Medicine Day a family affair are Dr and Mrs. Gary Strebel and their daughter, Susan.



## Court-ordered treatment called unethical

Two medical ethicists have argued that it is unethical for physicians to use the legal system to force pregnant women to undergo medical treatment or change their behavior for the benefit of their fetuses.

The report, by Lawrence J. Nelson, PhD, JD, of the Bioethics Consultation Group, Berkeley, Calif, and Nancy Milliken, MD, University of California, San Francisco, addresses numerous ethical and legal questions raised by a number of recent cases in which doctors have sought court orders to compel women to undergo surgery or other treatment for the sake of their fetuses.

By turning to the courts, the physician seeks to force medical treatment on a competent adult, an ethically perilous course under any circumstance, they say. "Judicial involvement inevitably invades a woman's privacy, entails the disclosure of confidential medical and personal information, and thrusts the woman into the adversarial system, where she must

defend her choices on a highly personal matter at a time when she is psychologically and physically ill-disposed to do so."

The report disputes opinions expressed in a number of articles in the medical literature that address the subject of compulsory treatment of pregnant women. "Many contain incorrect and misleading statements about the law applicable to maternal refusal of treatment and about a physician's potential legal liability for either honoring or disregarding the pregnant woman's wishes," they write.

A physician is ethically obliged to recognize the principle of respect for individual autonomy. In keeping with this, "all adult patients traditionally are deemed to have the right to accept or reject medical recommendations based on their personal priorities and values, a right respected and protected by the law."

*(continued)*



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## DEATHS

### Treatment (continued)

Although it is ethical, even mandatory, for a physician to try to persuade a pregnant woman refusing medically indicated treatment to change her mind, it is ethically unacceptable for a physician to use threats or deception to make a patient change her mind, they add.

"Often it is painful when the patient's medically foolish decision results in serious damage or death," the report says. However, the physician's frustration over a patient's noncompliance does not ethically justify ignoring or circumventing a pregnant woman's refusal to follow medical advice.

Society and its legal system go to great lengths to protect the right of persons to preserve their bodily integrity, the authors say. For example, the legal system does not force persons to donate organs involuntarily to others, even if they are relatives in desperate need. In one case, a "judge refused to order a woman to undergo a cesarean section after acknowledging that he lacked the right to force her to donate an organ to a child of hers, even if that child were dying," the report says.

Indeed, society even refuses to force the donation of organs or other tissues from cadavers to save the lives of thousands who need them. "We see no good reason why pregnant women should be treated with less respect than corpses," they add.

While the ethicists recognize that the behavior of women who abuse alcohol or other drugs poses significant potential for fetal harm, they doubt any system of legal punishment or intervention would decrease the incidence of this behavior, as it is an addiction over which these women have little control.

If anything, a system of legal coercion and punishment might drive these women away from the prenatal care that they and their fetuses especially need, or cause them to lie about their behaviors or symptoms if they knew their physicians could use the truth to force treatment on them, the authors say. "The relationship between a physician and a pregnant woman would become must less one of a partnership dedicated to a common goal and more a relationship of adversaries, like police officer and criminal suspect. . . . This, of course, would severely restrict physicians' ability to diagnose correctly and treat adequately both pregnant women and their fetuses."

The report appeared in the February 19 issue of the *Journal of the American Medical Association*.



### Charles Stewart Cunningham, MD 1920 - 1988

OSMA Life Member Charles S. Cunningham, MD, of Poteau died January 3, 1988. A native of Afton, Okla, Dr Cunningham was graduated from the University of Oklahoma School of Medicine in 1945. He established a general practice in Poteau in 1948, later moving to McAlester and then back to Poteau.

### Eugene Richard Flock, MD 1918 - 1988

General practitioner Eugene R. Flock, MD, died February 17. The Weatherford resident, a native of Joplin, Mo, was a 1951 graduate of the University of Oklahoma College of Medicine. Dr Flock practiced in both Weatherford and Thomas.

### Joseph Norman Kramer, MD 1937 - 1988

Retired Oklahoma City internist Joseph N. Kramer, MD, died February 16. A Life Member of the OSMA, Dr Kramer was born in Milwaukee, Wis. He earned his medical degree from the University of Wisconsin Medical School, Madison, in 1964 and established his practice in Oklahoma City in 1968.

### Frank Cornell Lattimore, MD 1908 - 1988

Frank C. Lattimore, MD, retired Kingfisher general practitioner, died January 30. Dr Lattimore, a Life Member of the OSMA, established his practice in Kingfisher in 1934, two years after his graduation from the University of Oklahoma School of Medicine. He served in the US Army from 1942 to 1946, attaining the rank of Captain.

### Leo Lowbeer, MD 1901 - 1988

Tulsa pathologist Leo Lowbeer, MD, a native of Vienna, Austria, died in Tulsa on February 3. Dr Lowbeer completed his medical education in Vienna in 1927. He fled Austria in 1938 and began his work at Tulsa's Morningside Hospital (now Hillcrest) the following year. Dr Lowbeer was the subject of a Leaders in Medicine article in the October 1987 OSMA *Journal*.

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## Study urges precaution

# Vapor from laser surgery may carry infection

Medical personnel should take infection-control precautions during laser treatment of patients with warts because the laser vapor may contain intact DNA from the wart-causing virus, says a report from Chicago.

Although the potential infectivity of this DNA is unclear, the study, by Jerome M. Garden, MD, of the Northwestern University Medical School, Chicago, and colleagues, suggests that "it would be prudent for all practitioners who use the laser in treating patients with viral infections or conditions associated with viruses to practice extreme care and safety throughout the laser procedure."

The carbon dioxide laser is the type most frequently used in medical applications and has been utilized to treat a variety of warts and numerous other conditions. When the instrument is used to cut or vaporize tissue, a plume of smoke develops that consists of vaporized material, steam, and particulate matter. This is normally suctioned away from the therapy area by a vacuum system and passed through a filter.

The new study examined the viral DNA content of the vapor plume produced during the laser treatment of verrucae (warts). The authors used two models for evaluation: an in vitro cutaneous bovine fibropapilloma (a common cow skin wart) and in vivo human warts.

The researchers exposed four bovine fibropapillomas to various laser settings and powers. The generated vapor was then collected and analyzed, revealing "intact bovine papillomavirus DNA for all power densities and energy (settings) used," the authors say.

The authors also studied laser vapor from seven patients being treated for plantar or mosaic warts and found "intact human papillomavirus DNA was present in the vapor from two of seven patients."

Although earlier studies failed to show any viable cellular material in laser vapor, "it is apparent from our study that intact viral DNA is recovered over a wide range of laser parameters in both the in vitro and in vivo setting," the study concludes. While acknowledging that the question of this material's potential infectivity remains unresolved, the authors note that "papillomavirus DNA alone has been demonstrated to be infectious. Thus, the medical implications of recovering intact viral DNA in laser vapor require serious consideration, especially in regard to risks for the patient and clinical personnel."

The report was published in the February 26 issue of the *Journal of the American Medical Association*.

## IN MEMORIAM

### 1987

Donald J. Blair	March 16
Richard M. Burke, MD	March 18
Eldon Clyde Mohler, MD	March 21
Paul Lewis Nave, MD	March 26
George Michael Willkom III, MD	March 30
Odis A. Cook, MD	April 4
Lawrence Edward Silvey, MD	April 9
Victor Gary Anderson, MD	April 10
Edgar W. Young, Jr., MD	April 12
Paul Newman Atkins, Jr., MD	April 20
John Wesley Williams, MD	May 16
John Jerome Coyle, MD	May 21
J. C. Rogers, MD	May 22
Scott Allen Morris, MD	May 24
Gladys Christine Smith, MD	May 27
John Ronald Watson, MD	June 14
Thomas Arthur Hosty, MD	June 17
Dan Cross Galloway, MD	July 12
Donald Owen Walker, MD	July 21
Cecil Reid Reinstein, MD	August 14
Alwin Marshal Clarkson, MD	September 1
Rex Elmer Kenyon, MD	September 16
Charles P. Bondurant, Jr., MD	October 12
James C. Smith, Jr., MD	December 30

### 1988

Charles Stewart Cunningham, MD	January 1
Charles Wallace Coyner, MD	January 4
Glen Franklin Wade, MD	January 12
Frank Cornwell Lattimore, MD	January 30
Leo Lowbeer, MD	February 3
Joseph Norman Kramer, MD	February 16
Eugene Richard Flock, MD	February 17

## BOOK SHOP

**Doctor and Teacher, Hospital Chief: Dr. Samuel Proger and the New England Medical Center.** Herbert Black. Chester, Conn: Globe Pequot Press, 1982. Pp 210, illus, price \$14.95.

This is the story of the development of the New England Medical Center in Boston and the role of a driving force, Dr Samuel Proger. It describes chronologically the transformation of a free clinic in Boston without associated inpatient beds and a struggling medical school into the well-known academic health center, Tufts-New England Medical Center. The author is a former medical writer for *The Boston Globe*.

In 1929, Samuel Proger arrived in Boston from Atlanta to begin his internship. He has remained since that time and at the time of publication of this book was chairman of the board of the New England Medical Center. This volume describes the trials and tribulations he experienced in building the center.

Herbert Black gives us a great deal about the history of the institution but only limited amounts concerning Dr Proger, the subject of the book. The reader wishes to know more about this dynamic person.

The book will obviously be of interest to those concerned with the development of academic health centers and for those who have had an association with this particular one.

Harris D. Riley, Jr., MD  
Oklahoma City

**Late Night Thoughts on Listening to Mahler's Ninth Symphony.** By Lewis Thomas. New York: Viking Press, 1983. Pp 168, price \$12.95.

This book is by one of America's foremost and prominent medical essayists. It contains 24 essays which range widely in subject matter. Their topics include nuclear warfare, computers, environmental

contamination, DNA, olfactory capacities, bees and other animals, and many others. The theme of some of these are familiar to most readers, but Thomas combines them with quiet humor. There is also a periodic dose of the author's own medical experience. One often wishes that some of the startling facts listed were referenced.

This is another readable and enjoyable collection of essays.

Harris D. Riley, Jr., MD  
Oklahoma City

### **A History of the Indians of the United States.**

By Angie Debo. Norman: University of Oklahoma Press, 1984 reprint of 1970. Pp 464, 63 illus, paper, price \$12.95.

This is the seventh printing of this fine book, first published in 1970. It is volume 106 in the *Civilization of the American Indian* series published by the University of Oklahoma Press and enjoys wide acclaim as an invaluable reference. The book contains an in-depth historical survey of the Indians of the United States, including the Eskimos and Aleuts of Alaska. It is an excellent source for those who have little or no knowledge of American Indian history and affairs.

This printing contains a notable change. In the preface, author Debo states that she is making certain important changes regarding the Sauk and Fox Indians and that she is "disentangling these allied but distinct tribes."

This book is enthusiastically recommended to all seeking a knowledge of Indians of this country.

Harris D. Riley, Jr., MD  
Oklahoma City

**Genitourinary Problems in Pediatrics** (Vol 23 in Major Problems in Clinical Pediatrics). By A. Berry Belman and G. W. Kaplan. Philadelphia: W. B. Saunders Co., 1981. Pp 337, illus, price \$39.50.

Increased attention has been given to genitourinary problems in infants and children in the last two decades. Separate and unique aspects within the field of urology have become increasingly appreciated. The authors' purpose is to provide pediatricians and primary physicians with an overview of problems of the genitourinary tract. This book covers the entire range of congenital and acquired genitourinary problems in children. Diagnostic evaluations and their importance in

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treating various disorders are noted. The book includes a good discussion of recent advances in radiographic techniques used in the diagnosis and management of urinary tract problems in children. The various disorders are examined in terms of embryology, anatomy, and management. There are also chapters dealing with obstruction of the urinary tract, urinary incontinence, neurogenic bladder, urinary diversion, and genital abnormalities in the male and in the female. There is good coverage, too, of developmental abnormalities of the kidney, exstrophy disorders, renal thrombosis, hypertension, tumors of the genitourinary tract, and urolithiasis.

Each chapter is followed by references which are, in general, well chosen.

The illustrations, many of which are taken with

permission from Campbell's *Urology* (1979) and *Clinical Pediatric Urology* (1976), are appropriately selected, supplement the text, and aid in understanding of the anatomy and corrective techniques in surgical procedures.

Most of the chapters are quite comprehensive and at the same time well written. A few chapters, such as those dealing with tumors of the genitourinary tract and intersex, do not provide the same in-depth analysis.

This is an excellent textbook of this important field. It provides a well-balanced view of topics and controversies in this field and is highly recommended.

Harris D. Riley, Jr.,  
Oklahoma City

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OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

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**Special Risk Patients:** VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

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**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

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Revised, April 1982.

5685

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978

2. Beaver, WT *Arch Intern Med*, 141:293-300, 1981.

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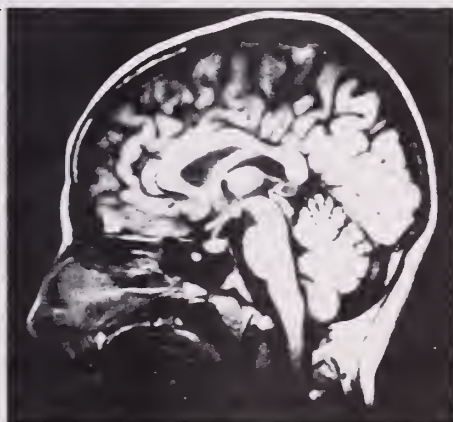
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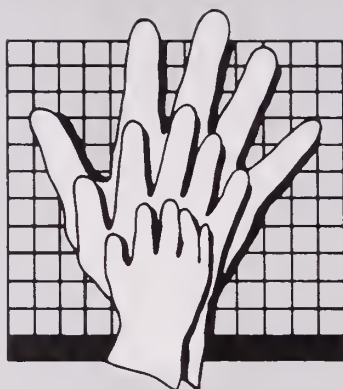
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### News

Readers are encouraged to submit news items of interest  
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important, please remember that each issue closes on the  
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### Back Issues

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### Convention '88 —

## Physician Partnerships . . . Working Together in Times of Change

OSMA and OSMAA have formed a PARTNERSHIP for Convention '88. In an effort to become stronger, the OSMAA has chosen "Physician Partnerships . . . Working Together in Times of Change" as its theme for the 1988 Annual Meeting. All meetings and events will be held Thursday through Saturday, May 5-7, 1988, at the Shangri-La Lodge in Afton.

The auxiliaries will begin with their Preconvention Board Meeting Thursday afternoon, breakfast for past state presidents and county presidents and presidents-elect Friday morning, following with the House of Delegates meeting. A special treat is in the offing for the auxiliary luncheon at noon on Friday. Friday afternoon will be free for golf, tennis, water sports, and/or a boat trip to Har-Ber Village. The Postconvention Board Meeting will be conducted Saturday morning.

The Thursday evening social event will be hosted by the OU Alumni Association, with former Governor George Nigh as the guest speaker. On Friday evening a fun time will be had by all when we hear impartations from a noted humorist, dine, and dance.

### MR IMPARTATION HIMSELF

The OSMA Auxiliary is extremely pleased this year to have Mr Ed Kelsay as our Friday luncheon speaker. Ed is an attorney, president of his own company, public speaker, adjunct professor, and writer. He is most entertaining, and I promise you will be quite enlightened having experienced the opportunity to hear Mr Kelsay.

### HOSPITALITY

As always, the Auxiliary Hospitality Room will be the hub of activity with exhibits and the AMA-ERF silent auction featuring a shopping spree to include bags, baggage, and baskets filled with intriguing surprises for any and every occasion. The auction is made possible by donations from each county.

### NATIONAL PARTNERS

The OSMA Auxiliary is honored to have as our guest for Convention '88 Betty Szewczyk (Mrs Edward), AMAA president, and Joan Milburn, Southern Medical Association Auxiliary president.

Mrs Szewczyk is from Belleville, Illinois. She has previously served at the national level as treasurer, North Central regional vice-president, director, chairman of the Long-Range Planning Committee, and member of the AMA-ERF and Health Projects committees. Betty and her husband, Edward, an ophthalmologist, have six children and seven grandchildren.

Convention '88 promises to be a retreat for strengthening, educating, and promoting positive action for partnerships. Do give this first priority by marking your calendars NOW. Watch for registration information! Join your physician partner . . . thus working together in times of change at the OSMA and OSMAA Annual Meeting May 5-7 in Afton.

*Linda Campbell*  
OSMAA Convention Chairman



## THE LAST WORD

■ **The Pacemaker Service of the University of Oklahoma Health Sciences Center Cardiology Section** will present its second annual pacemaker symposium on Tuesday and Wednesday, May 23 and 24. Sessions will be held at the Oklahoma Teaching Hospital Center for Continuing Education. Among the topics discussed will be basic pacemaker function, troubleshooting techniques for malfunctioning pacing systems, internal defibrillators, and DRGs. For further information or registration, call Floyd Brown at (405) 271-5811.

■ **Three Tulsa physicians have been named 1988 Doctors of the Year** by the Tulsa County Medical Society Auxiliary. **Dr Joseph Salamy** and **Dr Mason R. Lyons**, family practitioners, and **Dr Dixon N. Burns**, obstetrician-gynecologist, all TCMS Life Members, were honored during special ceremonies February 27 in Tulsa. This is the 35th year for the award, given annually by the TCMS Auxiliary to medical leaders for their service to their patients, profession, and community.

■ **The Annual Meeting of the Oklahoma State Medical Association** is now only a few weeks away, and Shangri-La Resort is gearing up for the May 5-7 event. OSMA members have received their schedules and ticket order forms and, ideally, have placed their orders and made their reservations. However, for those who have not, there is still time. Information about the meeting can be found elsewhere in this issue, or you can contact the OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118, 405-843-9571 or 1-800-522-9453.

■ **Doctors often write "OD" on prescriptions** to indicate a drug is to be taken "once daily," but a letter in the March 4 *Journal of the American Medical Association* says this shorthand can have many interpretations. R.A.P. Burt, MB, ChB, of Syntex Research, Palo Alto, Calif, says "OD" also can be interpreted to mean "one dose" or, from the Latin *omni die*, "every day." It might also mean "on demand" or "one drop" at a time. Burt says a colleague reports prescribing a several-day supply of pills for a patient to be filled OD — "on departure"

— but a nurse told the patient the pills were to be taken in "one dose." The patient wound up in an emergency room with a "drug OD." "Modern drugs are potent and the wrong dose or frequency of administration could result in disaster," Burt says. "With ambiguous instructions the risk is considerable, and we should not assume that colleagues will necessarily understand our abbreviation or even interpret it correctly."

■ **Anecdotal reports that undergoing mammography can be painful** have caused concern for some women considering the breast cancer screening technique. However, a report in the March *Archives of Internal Medicine* concludes that for the vast majority of women, "mammography causes no or mild physical discomfort and that actual pain is an uncommon occurrence." The study, by Paul C. Stomper, MD, of the Dana-Farber Cancer Institute and the Harvard Medical School, Boston, and colleagues, involved a survey of more than 1,800 women at seven breast imaging centers. Women recorded their experience on a six-point scale ranging from no discomfort to severe pain. Eighty-eight percent of those surveyed reported no discomfort or only mild discomfort. Only 9% reported moderate discomfort, 1% severe discomfort, and 1% moderate pain. "No woman had pain so severe that it would make her reconsider having a mammogram again," the authors say.

■ **"AIDS: Psychological and Social Issues" is the title** of a University of Oklahoma Health Sciences Center conference to be held in Oklahoma City Friday and Saturday, April 29-30. Randy Shilts, author of *And the Band Played On: Politics, People and the AIDS Epidemic*, will speak at a banquet on Friday. On Saturday, representatives from the Shanti Project of San Francisco will describe their approach to providing emotional and practical support for persons with AIDS and their loved ones. There will also be medical updates, presentations by state AIDS experts, and a panel discussion on preventing burnout in health care providers. For schedules and registration information, call Ms Rita Wells, 405-271-4488. □

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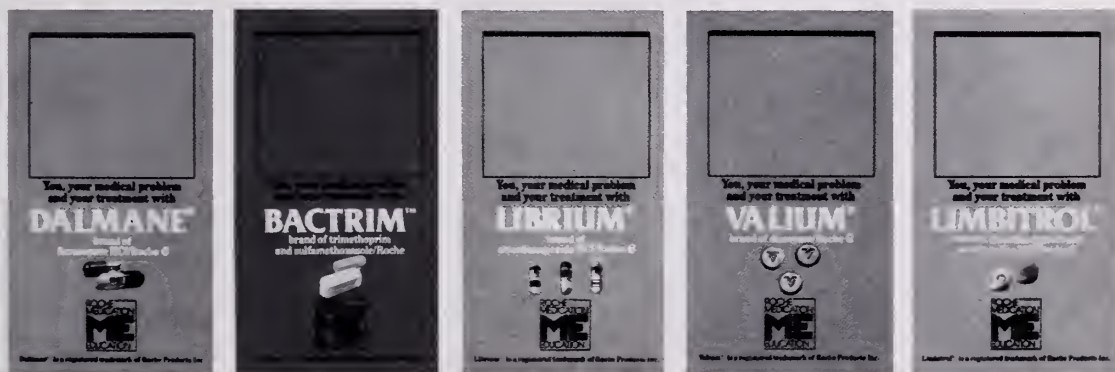


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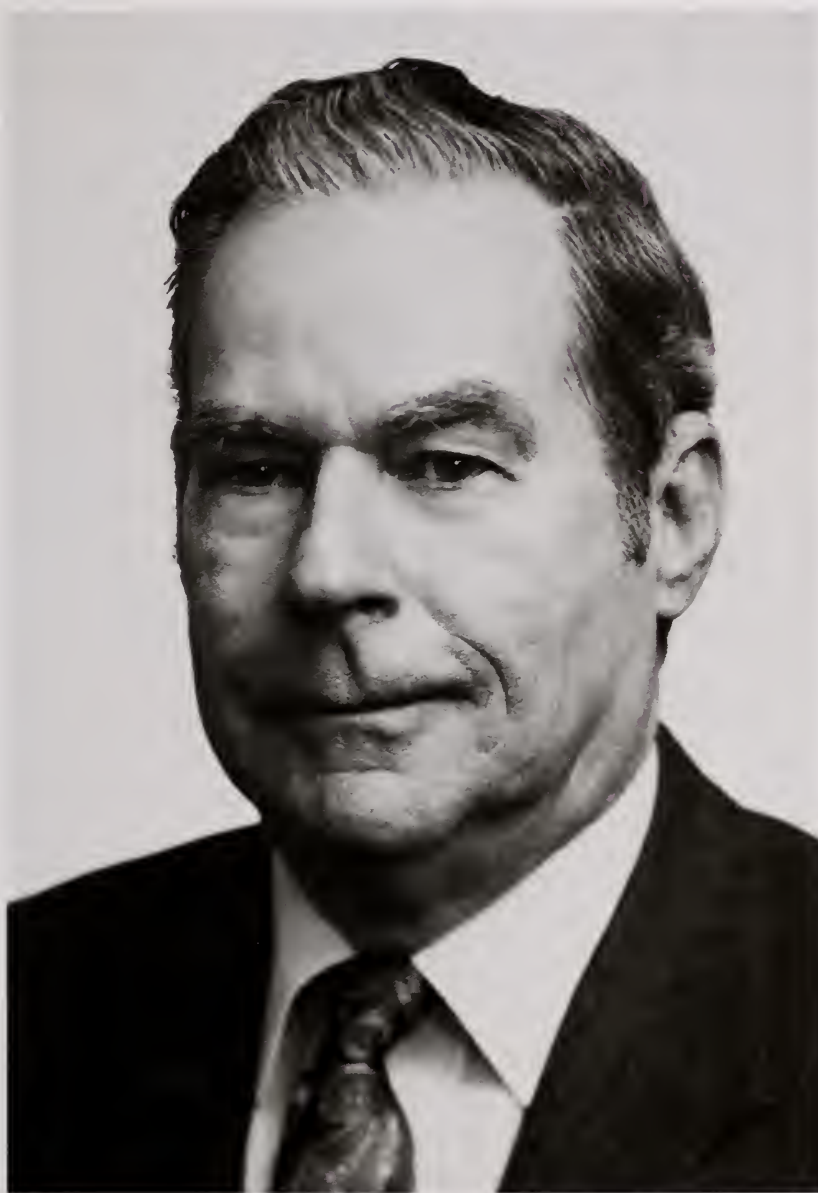
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	CONSTIPATION	RESPIRATORY DEPRESSION	SEDATION	EMESIS	PHYSICAL DEPENDENCE
HYDROCODONE		X			X
CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

- ◆ Vicodin offers: less nausea, less sedation, less constipation.

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hydrocodone bitartrate 5 mg. (Warning: May be habit forming) with acetaminophen 500 mg.

**The original hydrocodone analgesic.**



# Specify "Dispense as written" for the original hydrocodone analgesic.

**INDICATIONS AND USAGE:** For the relief of moderate to moderately severe pain.

**CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone.

**WARNINGS:**

**Drug Abuse and Dependence:** VICODIN® is subject to the Federal Controlled Substances Act (Schedule III). Psychic dependence, physical dependence and tolerance may develop upon repeated administration of narcotics; therefore, VICODIN should be prescribed and administered with the same caution appropriate to the use of other oral-narcotic-containing medications.

**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing.

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

**PRECAUTIONS:**

**Special Risk Patients:** VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture.

**Information For Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex; caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** The CNS-depressant effects of VICODIN may be additive with that of other CNS depressants. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic Effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose.

**Labor and Delivery:** Administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk; therefore, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSAGE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use, and the incidence of untoward effects is dose related.

The usual dose is one tablet every six hours as needed for pain. (If necessary, this dose may be repeated at four-hour intervals.) In cases of more severe pain, two tablets every six hours (up to eight tablets in 24 hours) may be required.

Revised, April 1982.

5685

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978
2. Beaver, WT *Arch Intern Med*, 141:293-300, 1981.

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Resulting from a lowered heart rate-blood pressure product.<sup>5</sup>

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**Safe in angina with coexisting hypertension, COPD, asthma, or PVD<sup>1,3,5,6</sup>**

\*CARDIZEM® (diltiazem HCl) is indicated in the treatment of angina pectoris due to coronary artery spasm and in the management of chronic stable angina (classic effort-associated angina) in patients who cannot tolerate therapy with beta-blockers and/or nitrates or who remain symptomatic despite adequate doses of these agents.

<sup>†</sup>See Warnings and Precautions.

Please see brief summary of prescribing information on the next page.

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# CARDIZEM<sup>®</sup> ANTIANGINAL PROTECTION diltiazem HCl/Marion PLUS SAFETY

Usual maintenance dosage range: 180-360 mg/day

## BRIEF SUMMARY

Professional Use Information

## CARDIZEM<sup>®</sup>

(diltiazem HCl)

30 mg, 60 mg, 90 mg, and 120 mg Tablets

## CONTRAINDICATIONS

CARDIZEM is contraindicated in (1) patients with sick sinus syndrome except in the presence of a functioning ventricular pacemaker, (2) patients with second- or third-degree AV block except in the presence of a functioning ventricular pacemaker, (3) patients with hypotension (less than 90 mm Hg systolic), and (4) patients who have demonstrated hypersensitivity to the drug.

## WARNINGS

- Cardiac Conduction.** CARDIZEM prolongs AV node refractory periods without significantly prolonging sinus node recovery time, except in patients with sick sinus syndrome. This effect may rarely result in abnormally slow heart rates (particularly in patients with sick sinus syndrome) or second- or third-degree AV block (six of 1,243 patients for 0.48%). Concomitant use of diltiazem with beta-blockers or digitalis may result in additive effects on cardiac conduction. A patient with Prinzmetal's angina developed periods of asystole (2 to 5 seconds) after a single dose of 60 mg of diltiazem.
- Congestive Heart Failure.** Although diltiazem has a negative inotropic effect in isolated animal tissue preparations, hemodynamic studies in humans with normal ventricular function have not shown a reduction in cardiac index nor consistent negative effects on contractility (dp/dt). Experience with the use of CARDIZEM alone or in combination with beta-blockers in patients with impaired ventricular function is very limited. Caution should be exercised when using the drug in such patients.
- Hypotension.** Decreases in blood pressure associated with CARDIZEM therapy may occasionally result in symptomatic hypotension.
- Acute Hepatic Injury.** In rare instances, significant elevations in enzymes such as alkaline phosphatase, LDH, SGOT, SGPT, and other phenomena consistent with acute hepatic injury have been noted. These reactions have been reversible upon discontinuation of drug therapy. The relationship to CARDIZEM is uncertain in most cases, but probable in some. (See PRECAUTIONS.)

## PRECAUTIONS

**General.** CARDIZEM (diltiazem hydrochloride) is extensively metabolized by the liver and excreted by the kidneys and in bile. As with any drug given over prolonged periods, laboratory parameters should be monitored at regular intervals. The drug should be used with caution in patients with impaired renal or hepatic function. In subacute and chronic dog and rat studies designed to produce toxicity, high doses of diltiazem were associated with hepatic damage. In special subacute hepatic studies, oral doses of 125 mg/kg and higher in rats were associated with histological changes in the liver which were reversible when the drug was discontinued. In dogs, doses of 20 mg/kg were also associated with hepatic changes; however, these changes were reversible with continued dosing.

**Dermatological events** (see ADVERSE REACTIONS section) may be transient and may disappear despite continued use of CARDIZEM. However, skin eruptions progressing to erythema multiforme and/or exfoliative dermatitis have also been infrequently reported. Should a dermatologic reaction persist, the drug should be discontinued.

**Drug Interaction.** Due to the potential for additive effects, caution and careful titration are warranted in patients receiving CARDIZEM concomitantly with any agents known to affect cardiac contractility and/or conduction. (See WARNINGS.)

Pharmacologic studies indicate that there may be additive effects in prolonging AV conduction when using beta-blockers or digitalis concomitantly with CARDIZEM. (See WARNINGS.)

As with all drugs, care should be exercised when treating patients with multiple medications. CARDIZEM undergoes bio-

transformation by cytochrome P-450 mixed function oxidase. Coadministration of CARDIZEM with other agents which follow the same route of biotransformation may result in the competitive inhibition of metabolism. Dosages of similarly metabolized drugs, particularly those of low therapeutic ratio or in patients with renal and/or hepatic impairment, may require adjustment when starting or stopping concomitantly administered CARDIZEM to maintain optimum therapeutic blood levels.

**Beta-blockers:** Controlled and uncontrolled domestic studies suggest that concomitant use of CARDIZEM and beta-blockers or digitalis is usually well tolerated. Available data are not sufficient, however, to predict the effects of concomitant treatment, particularly in patients with left ventricular dysfunction or cardiac conduction abnormalities.

Administration of CARDIZEM (diltiazem hydrochloride) concomitantly with propranolol in five normal volunteers resulted in increased propranolol levels in all subjects and bioavailability of propranolol was increased approximately 50%. If combination therapy is initiated or withdrawn in conjunction with propranolol, an adjustment in the propranolol dose may be warranted. (See WARNINGS.)

**Cimetidine:** A study in six healthy volunteers has shown a significant increase in peak diltiazem plasma levels (58%) and area-under-the-curve (53%) after a one-week course of cimetidine at 1,200 mg per day and diltiazem 60 mg per day. Ranitidine produced smaller, nonsignificant increases. The effect may be mediated by cimetidine's known inhibition of hepatic cytochrome P-450, the enzyme system probably responsible for the first-pass metabolism of diltiazem. Patients currently receiving diltiazem therapy should be carefully monitored for a change in pharmacological effect when initiating and discontinuing therapy with cimetidine. An adjustment in the diltiazem dose may be warranted.

**Digitalis:** Administration of CARDIZEM with digoxin in 24 healthy male subjects increased plasma digoxin concentrations approximately 20%. Another investigator found no increase in digoxin levels in 12 patients with coronary artery disease. Since there have been conflicting results regarding the effect of digoxin levels, it is recommended that digoxin levels be monitored when initiating, adjusting, and discontinuing CARDIZEM therapy to avoid possible over- or under-digitalization. (See WARNINGS.)

**Carcinogenesis, Mutagenesis, Impairment of Fertility.** A 24-month study in rats and a 21-month study in mice showed no evidence of carcinogenicity. There was also no mutagenic response in *in vitro* bacterial tests. No intrinsic effect on fertility was observed in rats.

**Pregnancy.** Category C. Reproduction studies have been conducted in mice, rats, and rabbits. Administration of doses ranging from five to ten times greater (on a mg/kg basis) than the daily recommended therapeutic dose has resulted in embryo and fetal lethality. These doses, in some studies, have been reported to cause skeletal abnormalities. In the perinatal/postnatal studies, there was some reduction in early individual pup weights and survival rates. There was an increased incidence of stillbirths at doses of 20 times the human dose or greater.

There are no well-controlled studies in pregnant women; therefore, use CARDIZEM in pregnant women only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers.** Diltiazem is excreted in human milk. One report suggests that concentrations in breast milk may approximate serum levels. If use of CARDIZEM is deemed essential, an alternative method of infant feeding should be instituted.

**Pediatric Use.** Safety and effectiveness in children have not been established.

## ADVERSE REACTIONS

Serious adverse reactions have been rare in studies carried out to date, but it should be recognized that patients with impaired ventricular function and cardiac conduction abnormalities have usually been excluded.

In domestic placebo-controlled trials, the incidence of adverse reactions reported during CARDIZEM therapy was not greater

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than that reported during placebo therapy.

The following represent occurrences observed in clinical studies which can be at least reasonably associated with the pharmacology of calcium influx inhibition. In many cases, the relationship to CARDIZEM has not been established. The most common occurrences as well as their frequency of presentation are: edema (2.4%), headache (2.1%), nausea (1.9%), dizziness (1.5%), rash (1.3%), asthenia (1.2%). In addition, the following events were reported infrequently (less than 1%):

Cardiovascular:	Angina, arrhythmia, AV block (first degree), AV block (second or third degree—see conduction warning), bradycardia, congestive heart failure, flushing, hypotension, palpitations, syncope.
Nervous System:	Amnesia, depression, gait abnormality, hallucinations, insomnia, nervousness, paresthesia, personality change, somnolence, tinnitus, tremor.
Gastrointestinal:	Anorexia, constipation, diarrhea, dysgeusia, dyspepsia, mild elevations of alkaline phosphatase, SGOT, SGPT, and LDH (see hepatic warnings), vomiting, weight increase.
Dermatologic:	Petechiae, pruritus, photosensitivity, urticaria.
Other:	Amblyopia, CPK elevation, dyspnea, epistaxis, eye irritation, hyperglycemia, nasal congestion, nocturia, osteoarthralgia, pain, polyuria, sexual difficulties.

The following postmarketing events have been reported infrequently in patients receiving CARDIZEM: alopecia, gingival hyperplasia, erythema multiforme, and leukopenia. However, a definitive cause and effect between these events and CARDIZEM therapy is yet to be established. Issued 6/87

See complete Professional Use Information before prescribing.

**References:** 1. Schroeder JS. *Mod Med* 1982;50(Sep):94-116. 2. Cohn PF, Braunwald E (ed): *Chronic ischemic heart disease*, in Braunwald E (ed): *Heart Disease: A Textbook of Cardiovascular Medicine*, ed 2. Philadelphia, WB Saunders Co, 1984, chap 39. 3. O'Rourke RA. *Am J Cardiol* 1985;56:34H-40H. 4. McCall D, Walsh RA, Fröhlich ED, et al. *Curr Probl Cardiol* 1985;10(8):6-80. 5. Frishman WH, Charlup S, Goldberger J, et al. *Am J Cardiol* 1985;56:41H-46H. 6. Shapiro W. *Consultant* 1984;24(Dec):150-159. 7. O'Hara MJ, Khurmi NS, Bowles MJ, et al. *Am J Cardiol* 1984;54:477-481. 8. Strauss WE, McIntyre KM, Pans AF, et al. *Am J Cardiol* 1982;49:560-566. 9. Feldman RL, Pepine CJ, Whittle J, et al. *Am J Cardiol* 1982;49:554-559.

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**Action:** Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

**Indications:** Yocon<sup>®</sup> is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

**Contraindications:** Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

**Warning:** Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

**Adverse Reactions:** Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.<sup>1,2</sup> Also dizziness, headache, skin flushing reported when used orally.<sup>1,3</sup>

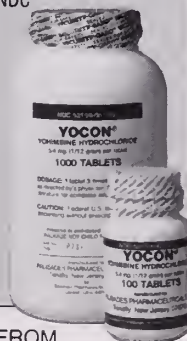
**Dosage and Administration:** Experimental dosage reported in treatment of erectile impotence.<sup>1,3,4</sup> 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.<sup>3</sup>

**How Supplied:** Oral tablets of Yocon<sup>®</sup> 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

#### References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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 Tablets

## A daily prophylactic dose in a single tablet.

Please see next page for brief summary of prescribing information.

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# K-DUR<sup>TM</sup> Microburst Release System<sup>TM</sup> (potassium chloride) Sustained Release Tablets

**INDICATIONS AND USAGE:** BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1 For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2 For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3 The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

**CONTRAINDICATIONS:** Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

**WARNINGS: Hyperkalemia—**In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

**Interaction with Potassium-Sparing Diuretics—**Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

**Gastrointestinal Lesions—**Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40–50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

**Metabolic Acidosis—**Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

**PRECAUTIONS:** The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

**Laboratory Tests:** Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

**Drug Interactions:** Potassium-sparing diuretics, see **WARNINGS**.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Long-term carcinogenicity studies in animals have not been performed.

**Pregnancy Category C:** Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

**Nursing Mothers:** The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:** One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS**, **WARNINGS**, and **OVERDOSSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS** and **WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

**OVERDOSSAGE:** The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS** and **WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

- 1 Elimination of foods and medications containing potassium and of potassium-sparing diuretics.
- 2 Intravenous administration of 300 to 500 mEq/hr of 10% dextrose solution containing 10–20 units of insulin per 1,000 ml.
- 3 Correction of acidosis, if present, with intravenous sodium bicarbonate.
- 4 Use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

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Rev 4/87

# CARAFATE<sup>®</sup> (sucralfate) Tablets

## BRIEF SUMMARY

### CONTRAINDICATIONS

There are no known contraindications to the use of sucralfate.

### PRECAUTIONS

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

**Pregnancy:** Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

### ADVERSE REACTIONS

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

### OVERDOSSAGE

There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

### DOSE AND ADMINISTRATION

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

### HOW SUPPLIED

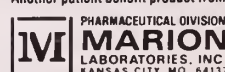
CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by C's on the other.

Issued 1/87

### References:

- 1 Korman MG, Shaw RG, Hansky J, et al. *Gastroenterology* 80:1451-1453, 1981
- 2 Korman MG, Hansky J, Merrett AC, et al. *Dig Dis Sci* 27:712-715, 1982
- 3 Brandstaetter G, Kratochvil P. *Am J Med* 79 (suppl 2C):36-38, 1985
- 4 Marks IN, Wright JP, Gilinsky NH, et al. *J Clin Gastroenterol* 8:419-423, 1986
- 5 Lam SK, Hui WM, Lau WY, et al. *Gastroenterology* 92:1193-1201, 1987

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# Ulcer therapy that won't yield, even to smoking

YIELD



What do you do for duodenal ulcer patients who should stop smoking, but won't? Both cimetidine<sup>1</sup> and ranitidine<sup>2</sup> have been shown less effective in smokers than nonsmokers.

Choose CARAFATE<sup>®</sup> (sucralfate/Marion). Two recent studies show Carafate to be as effective in smokers as nonsmokers.<sup>3,4</sup> A difference further illustrated in a 283-patient study comparing sucralfate to cimetidine<sup>5</sup>:

Ulcer healing rates:  
(at four weeks of therapy)<sup>5</sup>

Sucralfate:

All patients 79.4%

Smokers 81.6%\*

Cimetidine:

All patients 76.3%

Smokers 62.5%

Carafate has a unique, nonsystemic mode of action that enhances the body's own ulcer healing ability and protects the damaged mucosa from further injury.

When your ulcer patient is a smoker, prescribe the ulcer medication that won't go up in smoke: safe, nonsystemic Carafate.

Nothing works like

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sucralfate/Marion

Please see adjoining page for references and brief summary of prescribing information.

\*Significantly greater than cimetidine smoker group ( $P < .05$ ).





## ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,  
Massachusetts General Hospital, Boston, Massachusetts.  
Captain, U.S. Army Reserve.

**EDUCATION** Ithaca College, B.A. (Magna Cum Laude);  
Hamilton College (Pre-med); Harvard Medical School.

**RESIDENCY** General Surgical Internship. Neurosurgical  
Residency, Massachusetts General Hospital.

**CONTINUING EDUCATION** Neurology and Neuro-  
surgery Research Fellowship Training, National Institutes  
of Health.

**OUTSTANDING ACHIEVEMENTS** Olsen Memorial  
Fellowship, National Masonic Medical Research Foundation;  
Albert Schweitzer Fellowship, International Albert Schweitzer  
Foundation; Harvard Medical School Cabot Prize for Best  
Senior Thesis; recently published article, "Who Shall Live  
and Who Shall Die" in Newsweek Magazine.

“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells—without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General. //

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Soldier being examined for effects of high-altitude cerebral edema.

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### A Clinical Pathologist Looks at the Blue Cross and Blue Shield Laboratory Test Guidelines

Blue Cross and Blue Shield have mounted a national campaign to rationalize issued guidelines for ordering 15 commonly used diagnostic laboratory tests. Major newspapers and wire services have carried stories about these guidelines supported by many specialty groups with one notable exception, the College of American Pathologists.

Curiously, and with probable intent, no clinical pathologist played any role in the development of these guidelines. Some of us believe the recommendations show it.

It is easy to suspect the motivation of Blue Cross and Blue Shield, but what is the motivation of the physician groups supporting this proposal?

There are several possibilities. First, many of the physicians who have the time to join central decision-making committees are not in the day-to-day practice of medicine. They have little or no experience with real patients and practical solutions to their problems.

Centralized decision-making systems always make a lot of sense, especially to the central decision-makers, but they prevent the natural evolutionary changes necessary for medical progress.

The word "practice" in the phrase "practice of medicine" indicates that medicine is not a perfect science and that continuous changes are necessary to improve the quality of medical care. The establishment of guidelines codifies and solidifies this evolutionary process and slows the natural progress of medical advancements.

Second, the fundamental fallacy of these guidelines is that testing is assumed to be largely confirmatory in nature after careful evaluation of the patient by means of an exhaustive "complete" history and physical examination. This approach may have been appropriate for the year 1930, but it is not suitable for 1987.

Now, experienced physicians follow Sutton's Law. Willie Sutton, the famous bank robber, was asked, "Why do you rob banks?" He answered, "Because that is where the money is!"

Physicians follow the same principle in seeking data necessary for diagnosis and management of their patients. They seek out most easily available, simple data from a history, physical, x-ray or laboratory result that is most useful for helping the patient. Exhaustive, excessive gathering of historical

or physical examination data without regard to other possible routine sources of data is just as expensive, in most cases more expensive, than routine laboratory tests.

Certainly, these guidelines fail to place a value on a negative test or serial test to find trends. These guidelines place no value on a previous normal result as a comparison point for a subsequent, abnormal result.

Finally, much has been said about the lack of value of laboratory screening in a "healthy" population. But if the population is indeed "healthy," why do they ever come to the attention of a physician or a health facility? The guidelines make the assumption that if the patient says he or she is "healthy," then he or she is indeed "healthy." We know this is not correct. Many non-complaining "healthy" patients have findings — historical, physical, x-ray or from the laboratory — which, if detected, can lead to prevention of significant morbidity and mortality.

There is no argument that laboratory tests are overused, misused and underused, but to allow Blue Cross and Blue Shield or any other central decision-maker the authority to "set in stone" a vital evolutionary process of clinical laboratory test usage is wrong and clearly harmful to patients.

It is also naive for Blue Cross and Blue Shield to believe that they can save a large amount of money and maintain or improve the health of their clients. They have confused cost with charge. The minimal reduction in number of routine tests will not significantly lower costs of laboratory operation. Panel testing (multiple chemical tests performed automatically) is considerably less costly than individual, manual and, in some cases, discrete chemical analysis.

The American revolution was fought against a centralized decision-making system (King George of England) which in our minds was ineffective and wrong.

Since then, centralized decision-making systems have repeatedly been tried by governmental and quasi-governmental agencies with poor results, e.g. Joseph Stalin's five-year plans. These systems did not work then and they do not work now. It may soon become necessary to write some more of those "When in the course of human events . . ." letters!

—Lynn L. Myers, MD, Oklahoma City

## PRESIDENT'S PAGE

It is an eminent honor to be the President of the Oklahoma State Medical Association, and I come to that office with gratitude and diffidence. I appreciate the implicit opportunity to address the problems facing our marvelous profession, and I wince at the task of following the prior leaders whose insights and ideas have led us so well.



Problems are plentiful.

Medicare was born fatally flawed from the lack of a means test, yet Congress continues patching it for one more election cycle — and requires the medical profession to subsidize its several deficiencies.

Many lawsuits of dubious merit still harass our profession, and cause great expense for their defense plus oceans of emotional anguish for our physicians.

The insurance industry and the welfare industry still thoughtlessly try to transform medicine into a public utility, and convert the physician into a health vending machine activated by a credit card.

Many ancillary practitioners are still overreaching their capacity for responsibility in their search for a bigger slice of the economic pie. The medical profession's knowledge and experience must play a role in protecting the public welfare from under-qualified practitioners.

Alcohol and drug abuse continue to steal the talents of legions of our people and, as always, other dangerous diseases are now increasing and disabling people in the prime of life.

Our problem lists are endless, as solved problems are replaced by new issues. We again see that the purpose of the Oklahoma State Medical Association is to bring the collective genius of Oklahoma physicians to bear on the problems of our Oklahoma people. We shall never solve all difficulties, but we can engage our united strength and intellect in the daily problems our patients face — and make a difference for good.

We can keep high ethical and moral standards in the practice of medicine, and treat each of our patients as we individually would wish to be treated. We can personally help the colleague who leaves the high road of ethical behavior.

We can reaffirm — and improve — the high quality of medical care that our beloved Oklahoma people receive. We have the duty to translate the advances of medical science into improved health for our people; we must somehow find a way to overcome the quality deterioration that has been brought by inept government programs.

Deficient medical care can be and should be improved by education.

We should have, and express, informed opinions on the criteria of a proper medical education, and on the maintenance of quality care through continuing medical education.

We are citizens of a great republic, and we should protect and sustain the democracy that governs a free people. A united medical society offers a special channel to use our medical talents for those political purposes that benefit our patients and advance our profession.

Our tort liability system cries out to be rectified, and the ideas and values of medicine should be included in the changes. We must get the ear of our legislators, individually and collectively, so our experience can aid a return to reason in civil liability. It is time for each of us to contact and inform our elected officials about medical problems, and to advance our ideas of the best solutions.

On the economic front, we must return to being the agent of the patient, and firmly decline to be the wage minion of the government agency or insurance company. Our shield from third party economic extortion is quality medical care rendered directly to an informed patient.

The Oklahoma State Medical Association is effectively managed and well staffed, and is positioned to positively influence the future direction of medicine in Oklahoma if each physician member will lend talent to the task. I ask you to inform us of the problems you perceive, and any solutions you envision, and together these problems will be addressed.

Let us go to work together.

*Ray V. McIntyre, M.D.*



# Lymphoscintigraphy in the Management of Patients with Cutaneous Melanoma

Kavita K. Erickson, MD; Jay A. Harolds, MD

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*Cutaneous melanomas frequently spread via the lymphatics to regional lymph nodes. For most cutaneous melanomas, the accepted theory is wide local excision and regional lymphadenectomy of the draining nodes. Until recently, determining the nodes at risk has been a difficult problem in certain areas due to anatomic variation in the lymphatic pathways from individual to individual. The lymphatic pathways can now be easily identified by means of lymphoscintigraphy.*

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**I**t has been reported that approximately 80% of metastases from melanoma will occur in the regional lymph nodes, and most of these will develop within the first two years after diagnosis of the primary lesion.<sup>1</sup> Even in Stage 1 melanomas (Clark level III-IV), the incidence of lymphatic spread to regional nodes is 20% to 25%, and the incidence rises rapidly with thicker lesions.<sup>2</sup> This led to a number of studies advocating surgical resection of the nodes at risk as a means of improving the prognosis in patients with invasive melanoma.<sup>3</sup> This, however, presented a problem to the surgeons in deciding which nodes were at risk when ambiguous lymphatic

drainage patterns existed. For melanomas in the distal extremity or the inguinal or axillary region, the draining nodes are obvious. However, for lesions of the shoulder, trunk, head or neck, the appropriate draining pathway often is not readily apparent. For example, a melanoma located on the shoulder can drain to the ipsilateral axillary, supraclavicular, or infraclavicular lymph nodes, or any combination of the three.<sup>4</sup>

Prior to the advent of lymphoscintigraphy, the surgical decision for appropriate lymph node dissection could only be made based on past clinical experience and on the anatomic information available on lymphatic pathways.<sup>5</sup> This often required extensive nodal dissection for removal of all nodes at risk. Lymphoscintigraphy can delineate a patient's individual lymph pattern and thereby more accurately guide and often reduce the extent of surgical lymphadenectomy.<sup>6</sup>

Lymphoscintigraphy for cutaneous melanomas is an essentially noninvasive radionuclide study, and it represents the only clinically available technique which can accurately identify the lymphatic watershed.<sup>7</sup> At certain major cancer centers in the US, it has been shown to be clinically efficacious, but its use is not widespread in the medical community of Oklahoma. It is a simple, reproducible

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From the Baptist Medical Center of Oklahoma, Oklahoma City, Oklahoma.  
Direct correspondence to Kavita K. Erickson, MD, Baptist Medical Center, 3300 Northwest Expressway, Oklahoma City, OK 73112.



**Table 1. Summary of Nine Patients Who Presented with Cutaneous Melanoma at Baptist Medical Center  
(WLE = Wide Local Excision)**

Patient	History	Clinically Predicted Drainage Sites	Drainage Sites as Per Lymphoscintigraphy	Patient Management	Pathologic Diagnosis
I-46y/oM	Recurrent cutaneous melanoma of left deltoid, 1.8cm in size, Clark level IV, Breslow 3.7mm; primary melanoma was excised 11 months earlier.	Left axillary, left supraclavicular, left cervical.	Anterior and posterior left axillary nodes; no drainage to the cervical or supraclavicular nodes.	WLE and left axillary dissection.	Residual intralymphatic melanoma in excised skin of left arm; 15 axillary nodes all negative for tumor.
II-83y/oM	1.2x1.5cm pigmented lesion on right upper extremity.	Right axillary, right cervical, and right supraclavicular.	Right anterior and posterior axillary nodes.	WLE without nodal dissection.	Superficial spreading melanoma with focal & minimal invasion of papillary dermis for less than 0.75mm, Clark level II.
III-66y/oM	6x8mm pigmented nodule on right upper quadrant of abdomen.	Ipsilateral or contralateral axillary, inguinal, supraclavicular, anterior cervical.	Right ant. cervical and axillary nodes; lymphoscintigraphy was performed six weeks after surgery.	WLE without nodal dissection.	Superficial spreading melanoma, Clark level III, Breslow 0.43mm with margins free of atypia.
IV-48y/oF	2.6x1x1cm abdominal melanoma in situ (based on incisional biopsy), located 2cm to the left of L-2 vertebral body.	Same as above.	Left axillary nodes only.	WLE without nodal dissection.	Melanoma in situ, Clark level I.
V-24y/oM	Five weeks post-WLE of melanoma on left mid-back, overlying posterior left 12th rib, 2.4 cm from midline.	Ipsilateral or contralateral axillary, inguinal, supraclavicular, posterior cervical.	Bilateral axillary nodes and left clavicular nodes.	WLE without nodal dissection	Not available.
VI-48y/oM	Two year history of enlarging pigmented lesion on right upper back 3cm from midline; it was 2.4 x 3.0cm at time of presentation.	Same as above.	Bilateral axillary nodes and left supraclavicular nodes; lymphoscintigraphy was performed five weeks after surgery.	WLE without nodal dissection; follow-up CT of chest including axillary regions, and soft tissue xeromammography of both axillae.	Superficial spreading melanoma, Clark level III with clear surgical margins.
VII-35y/oF	Two week history enlarging pigmented nevus on midline of back at level of inferior scapular margin; it measured 1x1.1x0.1cm at time of presentation.	Same as above.	Bilateral axillary nodes and right posterior cervical nodes.	WLE without nodal dissection.	Melanoma in-situ, Clark level II with margins free of atypia.
VIII-74y/oF	1.5x1.0cm lesion on right infra-scapular region.	Same as above.	Right posterior and lateral axillary nodes.	WLE and removal of one lymph node identified on lymphoscintigraphy.	Malignant melanoma, Clark level IV, Breslow 1.5mm; lymph node negative for malignancy.
IX-37y/oM	1.1x0.6cm pigmented lesion on left flank.	Same as above.	Left axillary nodes.	WLE without nodal dissection.	Malignant melanoma, Clark level III.

test that can be implemented in any nuclear medicine department. The purpose of this article is to outline the indications, review the technique, and illustrate the clinical applications of cutaneous melanoma lymphoscintigraphy.

## METHOD OF EXAMINATION

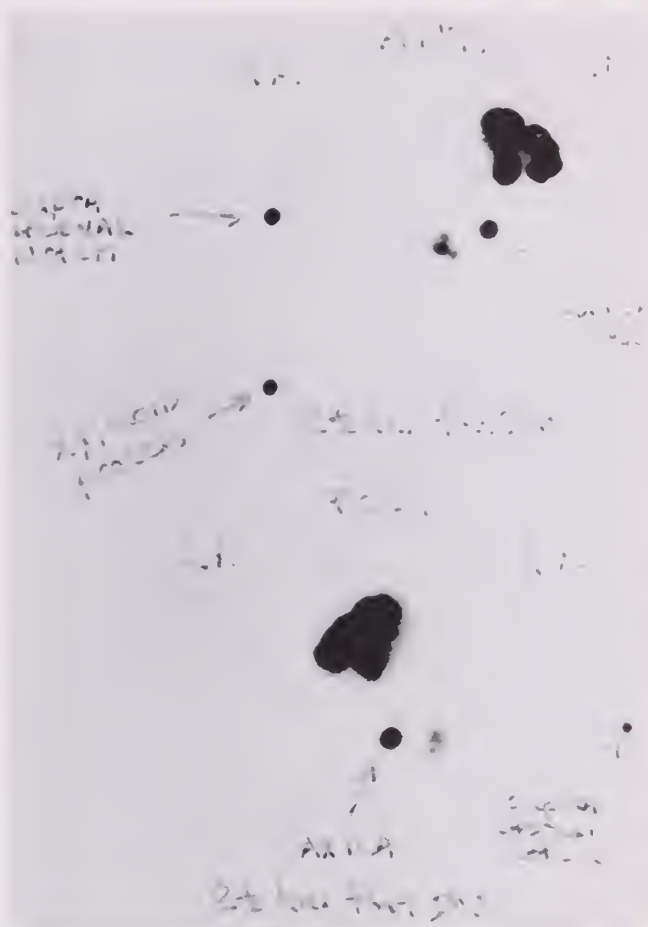
Antimony trisulfide colloid (Cadema Medical Products, Inc., Meddletown, NY) is supplied in sterile, nonpyrogenic kit form (Lymph-scan kit) and labeled with 1 mCi to 3.0 mCi of  $^{99m}\text{Tc}$  as sodium pertechnetate in a volume of less than 2.0 ml. Local anesthesia is not advisable when using  $^{99m}\text{Tc}$  antimony sulfur colloid due to the marked acidity of the antimony solution, and it is not needed, as only minimal discomfort occurs with the radiocolloid injection.<sup>8</sup>

All patients gave written informed consent. Each had pathology-proven primary melanoma. The skin surrounding the incision site following biopsy or wide local excision was first cleansed with 10% povidone-iodine (Betadine). Using a 25-gauge needle, four to six intradermal injections (500 to 600 mCi of  $^{99m}\text{Tc}$  antimony sulfur colloid per injection) were made circumferentially around the lesion. Since the invasion of melanoma is generally confined to the dermis, care must be taken to avoid deep subcutaneous injections, as such drainage patterns may not be similar to those of lymphatic paths from the primary melanoma.<sup>6</sup>

Imaging was performed using a 55-photomultiplier tube, large field Technicare Omega 500 gamma scintillation camera equipped with a high resolution, all-purpose parallel-hole collimator and utilizing a 20% window centered over the 140 keV photopeak of  $^{99m}\text{Tc}$ .<sup>9</sup> Image counts were obtained for six minutes per view, or a minimum of 100,000 counts per view. Scans of the primary site were made immediately following injection, and anterior and posterior views of all regional node groups were obtained three to four hours after injection.

## CASE PRESENTATION

Nine patients with cutaneous melanoma were referred for lymphoscintigraphy to identify the regional lymphatic drainage of each melanoma. Two of the melanomas were located on the proximal upper extremity, two were on the anterior trunk, and the other five were on the posterior trunk. Table 1 summarizes each patient's data.



**Figure 1.** Image obtained two-and-one-half hours following injection around the lesion site in the left deltoid area in patient I. Anterior and posterior views show uptake limited to ipsilateral axillary nodes. No change was seen on delayed views taken at four hours. These findings led to a more conservative operation than would have been performed otherwise.

Clinically predicted drainage sites in the two patients with proximal upper extremity melanoma included three nodal groups; lymphoscintigraphy in both patients showed that lymphatic drainage was directed to only one nodal group (Fig 1). Similarly, in the two patients with anterior truncal melanoma, clinically predicted drainage sites included eight different nodal sites, leading to uncertainty of the exact drainage pattern. In both patients, lymphoscintigraphy showed that drainage was limited to only one or two nodal groups (Fig 2).

The clinically predicted drainage sites of the five posterior truncal melanomas also included eight different nodal sites. In patients V, VI, and VII, lymphoscintigraphy demonstrated lymphatic drainage to only three nodal groups (Fig 3). In patients VIII and IX, lymphoscintigraphy showed lymphatic drainage limited to the ipsilateral axilla.



**Figure 2.** Four-hour anterior view from patient III with primary melanoma located on right upper quadrant of abdomen. Uptake was limited to the ipsilateral axillary and cervical nodes. Although the inguinal nodes and the nodes on the contralateral side were considered at risk clinically, lymphoscintigraphy showed only two nodal groups to be at actual risk.



**Figure 3.** Four-and-one-half hour posterior view from patient V with primary melanoma on left mid-back. The only marker placed is the  $\text{Co}^{57}$  over the lower pelvis. Uptake is seen in both axillae and the left supraclavicular nodes. Identification of specific nodes at risk for lymphatic spread of tumor allowed close observation of these areas during follow-up visits.

In all nine patients, the number of nodal sites at risk for metastatic spread of tumor as demonstrated by lymphoscintigraphy was clearly reduced in comparison to the numerous clinically predicted drainage sites. The knowledge gained from lymphoscintigraphy decreased the amount of nodal dissection in patient I and resulted in manageable follow-up with attention directed to specific node groups in seven patients. One patient was lost to follow-up, but all other patients remain tumor free at present.

## DISCUSSION

Although elective lymph node dissection for cutaneous melanoma remains controversial, surgeons continue to use it for staging purposes and

for its potential therapeutic benefit in patients at high risk for nodal metastasis. Similarly, the basic assumption behind the clinical application of lymphoscintigraphy in these patients is that identification and excision or continued follow-up of the lymph nodes most at risk for development of metastasis will improve survival.

Our experience shows lymphoscintigraphy to unambiguously identify the lymphatic drainage of cutaneous malignant melanomas. Selective dissection of the nodes at greatest risk can be performed on the basis of these findings. Selective lymph node dissection reduces morbidity and disfigurement, and it can give accurate prognostic information.

The procedure using  $^{99\text{m}}\text{Tc}$ -labeled antimony sulfur colloid scintiscanning is simple to perform in any nuclear medicine laboratory, with no variation



in results among physicians injecting the sites. Antimony sulfur colloid is rapidly absorbed by interstitial fluid, flows well in lymphatics (within minutes), and has a relatively high uptake by lymph nodes.<sup>2</sup> The small particle size of this colloid (3-12 mu) makes it possible to visualize multiple nodes in a relatively short time (2 to 4 hours).<sup>3</sup> <sup>99m</sup>Tc is an ideal radionuclide as it is widely available, has a short physical half-life of 6 hours, and has low radiation dose but sufficient energy to yield satisfactory images.

The best time for employing this technique is after a simple exisional biopsy, but before a definitive operation with wide local excision. Although not seen in our study, in studies done at other hospitals, the colloid, on occasion, either failed to migrate or migrated to nodal groups not actually draining the original melanoma site, in those cases in which the definitive operative procedure of widely excising the melanoma had already been performed. This was presumably due to the interruption of lymphatics resulting from the surgical procedure and establishment of alternative pathways.<sup>6</sup>

Currently, antimony sulfur colloid lymphoscintigraphy appears to be most useful in determining lymphatic drainage in patients with cutaneous melanomas at ambiguous sites of the trunk, head and neck, and upper proximal extremity.<sup>10</sup> Lymphoscintigraphy does not identify the presence or absence of metastasis in melanoma. It only identifies the nodes at risk, and in no instance have nodal metastases developed in an area not predicted by the

scintigram.<sup>7</sup> Exact use of the information obtained from the scan, ie, whether to dissect certain node groups, is still a matter of clinical judgment and is largely determined by location and microstage of the primary melanoma. □

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### Coming in June . . .

Among the manuscripts being considered for publication in June are a report on clinical psychology and cost effective rehabilitation, a study of the occurrence of renal cell carcinoma in a rural setting, and some personal clinical observations on adenoidectomy.

# Sudden Infant Death Syndrome: Four Deaths in One Family

J. R. Harkess, MD; P. L. Toubas, MD; C. S. Choi, MD; F. B. Jordan, MD; G. R. Istre, MD

*Between 1976 and 1985, four of five infants born to a man and wife died of sudden infant death syndrome (SIDS). Mendelian inheritance could not be demonstrated, and no evidence of filicide was found. This occurrence is uncommon and may represent a subset of the syndrome with an etiology different from that of most singleton cases.*

Early studies estimated the risk of sudden infant death syndrome (SIDS) in subsequent siblings of an infant who died of SIDS to be increased four- to ten-fold.<sup>1-3</sup> However, recent studies have shown the risk to be much lower.<sup>4,5</sup> Few reports mention the occurrence of multiple deaths (>2) within families. We report a family in which four of five infants born over a ten-year period died of SIDS.

## CASE REPORT

On April 6, 1976, following an uncomplicated pregnancy and birth, an apparently normal 5 lb 12 oz female infant was born at term to a 16-year-old

Mexican-American woman and her 24-year-old Mexican-American husband. Fed infant formula, the child gained weight normally. On the afternoon of June 22, 1976 (2½ months of age), the infant was found dead in her bassinet by her mother. The child had not been ill, and postmortem examination by a medical examiner did not reveal a cause of death.

The couple's second child was born on April 12, 1977, a 6 lb 11 oz full-term male infant. The child appeared well until June 2, when at seven weeks of age, he was found dead in his crib 30 minutes after being put to bed for the evening. A postmortem examination by a medical examiner revealed pleural, thymic, and epicardial petechiae, and a sacral mongolian spot, but no cause for the death was ascertained.

The third child, a 6 lb 13 oz female infant born at term on November 22, 1978, was seven years old at the time of interview. She was well and had no history of apnea, cyanosis, or seizure disorder.

The couple's fourth child, an apparently normal 6 lb 14 oz male infant was delivered on December 14, 1981. During a crying spell at three weeks of age he became apneic and cyanotic. The father described the child as "stiff" for a few seconds, after which he became limp and resumed breathing. In the emergency room at a local hospital the child

This work was done at the Epidemiology Service of the Oklahoma State Department of Health in conjunction with the Office of the Oklahoma State Medical Examiner, Oklahoma City, Oklahoma.

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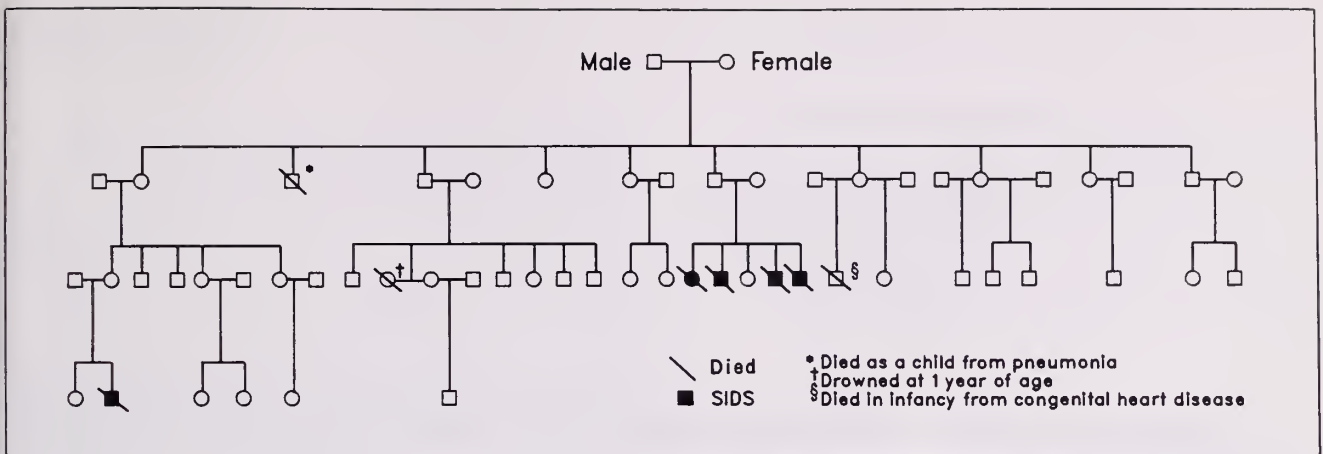


Figure 1. Deaths from sudden infant death syndrome (SIDS) in one extended family, Oklahoma

appeared normal and a two-day hospital admission for observation was uneventful. No subsequent apneic episodes were observed, but on April 22, 1982, at five months of age, the child failed to wake at his usual time in the morning and was found dead. An external examination revealed no sign of injury; an autopsy was not performed.

The mother's fifth pregnancy was complicated near term by edema, hypertension, and pre-eclampsia, which necessitated cesarean section on August 3, 1985. The healthy appearing, 7 lb 12 oz male infant was well until the age of two months, when he developed an afebrile illness with cough, irritability, and diarrhea. Three days later his mother observed him to cry loudly for about five minutes after which he stopped breathing, developed perioral cyanosis, and stiffened while "his eyes rolled back in his head." After stimulation, the infant resumed breathing. In the emergency room, perioral and peripheral cyanosis were noted, but quickly resolved. A chest X-ray showed a left mid-lung infiltrate. The child was hospitalized for three days and treated with antibiotics; resolution of the infiltrate was noted on repeat chest X-ray.

On November 14, at 3½ months of age, the child was heard by his mother to give a brief unusual-sounding cry. She found him to be cyanotic, apneic, and stiff. After stimulation and mouth-to-mouth resuscitation, the child's breathing was restored. In the emergency room the infant was found to be pink and alert; physical examination, chest X-ray, and complete blood count were normal. Bronchiolitis was diagnosed, and the patient was discharged.

On February 10, 1986, at six months of age, the infant awoke early and seemed irritable. He went back to sleep and was found dead in his crib later that morning. Postmortem examination revealed an

insignificant parietal scalp contusion and epicardial, thymic, and pleural petechiae, but no apparent cause of death. A toxicologic screen was negative.

The mother, a life-long homemaker, had enjoyed good health; she had never smoked, did not regularly consume alcoholic beverages, and did not use illegal drugs or regularly take medication. In her large extended family there had not been another infant death in at least four generations. The father, a worker in an auto parts store since 1980, had also enjoyed good health. He had smoked two packs of cigarettes a day since his late teenage years and had a history of occasional alcoholic binges until his abstinence in 1983. In the father's large extended family, two children had died in infancy. One died of

**... No evidence of filicide, which has been suspected in some instances of multiple sudden infant deaths, was found in these cases.**

congenital heart disease, while the other was found dead in his crib at 5½ months of age (Fig 1). No explanation was found on autopsy and the death was attributed to SIDS.

Since their marriage in 1975, the couple had lived in four different dwellings in the same rural community. Only the first two children were born while the family lived at the same residence. No unusual environmental exposures or child-rearing



practices such as mixing corn syrup with infant feeding were identified.

The medical examiners in each of the four cases attributed the deaths to SIDS. No evidence of child abuse was found by local authorities or medical examiner's investigation. No injuries suggestive of parental abuse were identified by the family's physician or in a review of medical records.

## DISCUSSION

Sudden infant death syndrome is defined as the sudden death of an infant or young child that is unexpected by history and in which a thorough postmortem examination fails to demonstrate an adequate cause (Second International SIDS Conference, 1969). Three of the infant deaths in this family met that definition and the fourth, although not autopsied, was also probably due to SIDS. Other instances of multiple (>2) sudden infant deaths have been reported;<sup>6-9</sup> however, in five studies<sup>1-5</sup> of more than 3,000 sibships with at least one SIDS death, only one family was reported with more than two deaths.<sup>2</sup> The occurrence of multiple SIDS deaths in a sibship is uncommon and may represent a subset of the syndrome with an etiology different from that of most cases.

The pedigree for this family (Fig 1) was not consistent with any type of Mendelian inheritance, although non-Mendelian genetic factors were suggested by the sudden infant death of a paternal relative. Of the recognized prenatal factors associated with an increased risk of SIDS, such as maternal smoking, maternal narcotic addiction, preterm or low birth weight infants, delayed prenatal care, maternal or paternal age less than 20 years, and low socioeconomic status,<sup>10</sup> only the latter two were present. Although toxemia was present in the last birth, it was not found in earlier pregnancies. Since the deaths were separated in time and by the location at which the family was living, possible environmental factors, if they contribute to SIDS, seem less likely. Lastly, no evidence of filicide, which has been suspected in some instances of multiple

sudden infant deaths,<sup>8</sup> was found in these cases.

Most evidence points to abnormalities in the regulation of breathing as the cause of many cases of sudden infant death.<sup>10</sup> Apneic episodes were observed by the parents in two of these infants, but they occurred while the children were awake and in association with "stiffening," suggesting a seizure disorder may have been present. Since surviving family members had no history to suggest a seizure disorder, sleep disturbance, or underlying cardiac disease, no studies were performed. Electroencephalograms, if they could have been performed on the affected infants before death, might have helped to better understand this otherwise unexplained familial cluster of sudden infant deaths.



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# Early Diagnosis of Acoustic Neuroma

Warren F. Gorman, MD

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*Early diagnosis of acoustic neuroma is based on the history of unilateral, progressive deafness and tinnitus, with imbalance. Examination and laboratory testing confirm this diagnosis.*

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**A**coustic neuroma, a slow-growing tumor of the eighth cranial nerve, represents about 10% of intracranial tumors,<sup>1,2</sup> being the third most common intracranial tumor, after gliomas and meningiomas.<sup>3</sup> Small acoustic neuromas, 1 mm in diameter, were found in 2% of autopsies on 490 unselected patients who had no complaints and no abnormal test results concerning hearing or balance.<sup>4,5</sup> Although this slow growth thus represents a silent threat, early diagnosis of acoustic neuroma by the family physician, and surgical treatment by the otologist or neurosurgeon, will result in cure or marked improvement, with the improvement being best in the earliest diagnosed cases.<sup>6,7</sup>

## CLINICAL HISTORY

The cardinal symptoms are unilateral and progressive deafness, tinnitus, and imbalance.<sup>8</sup> A sudden onset is rare.<sup>2,3</sup> Most patients are between 30 and 60 years old, with a slight preponderance of females.

Diminished hearing when using the telephone, or inability to hear speech with one ear, is often the

first complaint. This loss usually develops insidiously.<sup>8</sup> Of all cases of unilateral progressive hearing loss, about 10% are due to acoustic neuroma.<sup>1</sup> Early on, hearing loss is of high pitched sounds, because the fibers in the cochlear nerve which transmit high pitches are peripheral.<sup>1,3</sup> Unilateral speech discrimination loss, or the inability to hear words with one ear, appears early.<sup>9</sup>

Tinnitus is unilateral. Tinnitus is any subjective, abnormal noise, perceived as arising from within the ear or head. The tinnitus may be of high pitch or low pitch,<sup>3</sup> and is often slowly progressive, in keeping with the slow growth of the tumor; however, tinnitus may also be intermittent.<sup>10</sup> A sense of fullness in the affected ear is also an early symptom, which is often misdiagnosed as eustachian tube dysfunction.<sup>10</sup> There occasionally may be pain, referred to one mastoid region,<sup>2,10</sup> or a vague, aching discomfort in the external ear canal,<sup>3</sup> often misdiagnosed as inflammatory.

Numbness of one side of the face appears in large tumors, whose growth has compressed the fifth cranial nerve, which is the sensory nerve of the face.<sup>6</sup> This numbness may be intermittent and has been misdiagnosed and mistreated as an anxiety symptom. Pain in one side of the face, which is intermittent and ticlike, can represent involvement of the fifth cranial nerve by larger tumors, defined as being over 2 cm in diameter.<sup>3,16</sup>

The patient may on rare occasions complain of an inappropriate salty taste,<sup>8</sup> or a foul taste.<sup>11</sup> Rarely, the patient may complain of loss of taste over the

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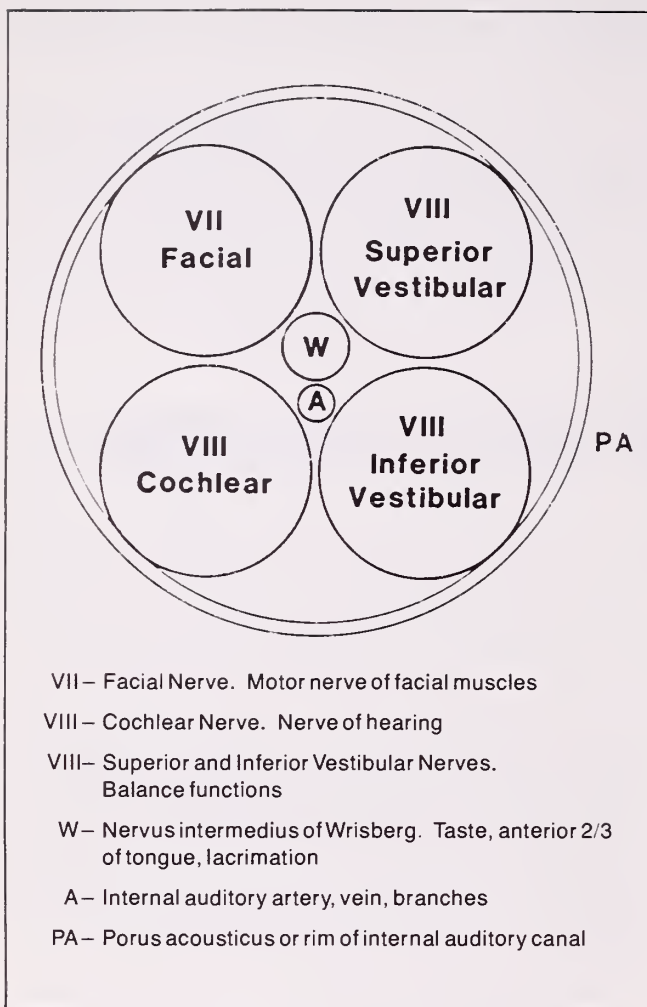


Figure 1. Diagram of Internal Auditory Canal

anterior  $\frac{2}{3}$  of one side of the tongue.<sup>14</sup> There may be loss of tearing in one eye. In occasional early cases, there may be unilateral crocodile tears,<sup>12</sup> or lacrimation while salivating.<sup>13</sup> These symptoms are due to compression of the nervus intermedius, or nerve of Wrisberg, which is located between the seventh and the eighth cranial nerves (Fig 1), and serves taste, above noted, and lacrimation.

The third cardinal symptom, after unilateral deafness and unilateral tinnitus, is unsteadiness or imbalance, often mild at first. This disequilibrium<sup>15</sup> is a sign of vestibular disturbance, due to the growth of this tumor on the inferior or the superior vestibular nerve.<sup>3,5,10</sup> The vestibular nerves, subserving balance, are part of the eighth cranial nerve. The inferior vestibular nerve supplies only the posterior semicircular canal and the saccule,<sup>10</sup> while the superior vestibular nerve supplies the remainder of the labyrinth (Fig 2). One explanation of why disequilibrium is not more severe when the nerves of balance are directly attacked by this tumor, is that

the higher brain centers adapt to a slow and gradual increase in stimulation.

Dizziness or giddiness, with different meanings for different patients and different examiners, frequently appears.<sup>15</sup> As the acoustic neuroma grows out of the internal auditory canal, if it becomes very large in size,<sup>16</sup> it will compress the cerebellum or its peduncle; instability of gait and vertigo may appear.

Vertigo is a false perception of movement. In subjective vertigo, the patient falsely perceives that he is moving, while in so-called objective vertigo, the patient falsely perceives that the environment is moving. Occasional falling toward the side of a very large tumor has been reported.<sup>3,17</sup> The history of these symptoms of cerebellar disease is associated with physical findings of impaired alternating movements, dysmetria, dyssynergia, and ataxia, particularly on tandem walking.<sup>18</sup> (Tandem walking is familiar in a sobriety test, where the subject is instructed to walk forward in a straight line, by placing the heel of the leading foot directly in front of the trailing foot.)

Headache may sometimes appear in intermittent form or progressively, and may be either suboccipital in location or generalized.<sup>1</sup> However, headache is a symptom of so many conditions that its value for diagnosis is small, unless it is linked to other symptoms and signs.

## ANATOMY

Within the normal internal auditory canal, its medial opening being called the porus acousticus, which is about 5 mm in diameter, is the neurovascular bundle, about 3 mm in diameter. Anteriorly, the neurovascular bundle consists of the facial nerve above and the cochlear nerve below. Posteriorly, there are the superior vestibular nerve and the inferior vestibular nerve. In the center of this bundle are the nervus intermedius of Wrisberg and the internal auditory artery.<sup>19</sup> Figure 1 diagrams these structures' functions.

The location of the internal auditory canal is about 1 cm behind the tip of the petrous bone. Gradual growth of an acoustic neuroma can produce a trumpet-shaped flaring of this canal's opening, or an enlargement of the entire canal, that is seen on radiologic examination.<sup>20</sup> Since these tumors begin their growth within this canal, a small acoustic neuroma, under 2 cm in diameter,<sup>2,16</sup> can later grow sufficiently to compress the brain stem, then becoming a brain tumor.



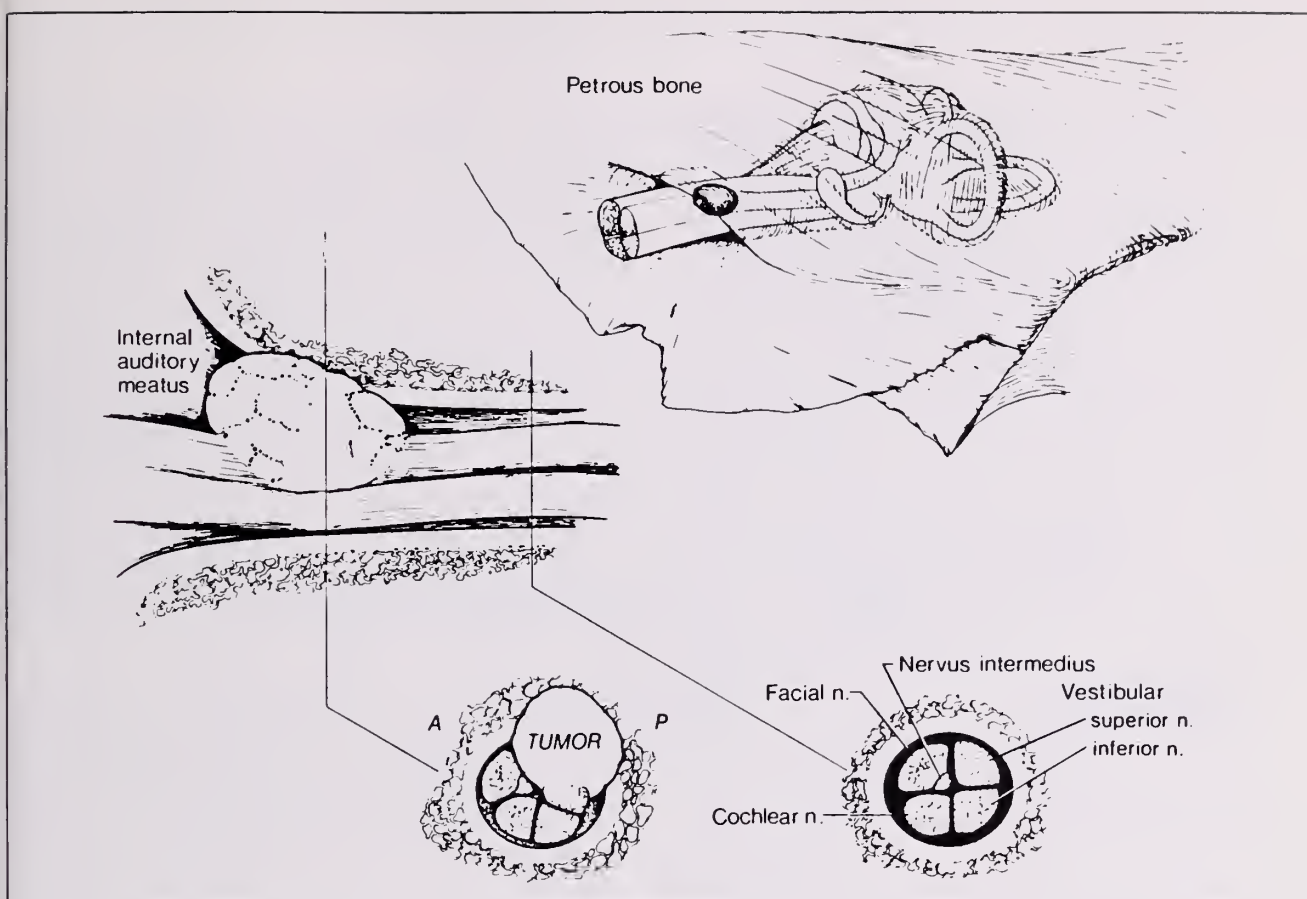


Figure 2. Small Acoustic Neuroma (From Hart 1981, reference 1)

Microscopically, acoustic neuromas are typically composed of palisades of dense, spindle-shaped cells (Antoni A), to which are added foamy histiocytes with cyst formation (Antoni B), neither with malignant transformation. These cells originate from Schwann cells, which are the cells of the myelin sheaths of the myelinated nerves. Therefore these tumors are called Schwannomas or neurilemmomas.

## DIAGNOSIS

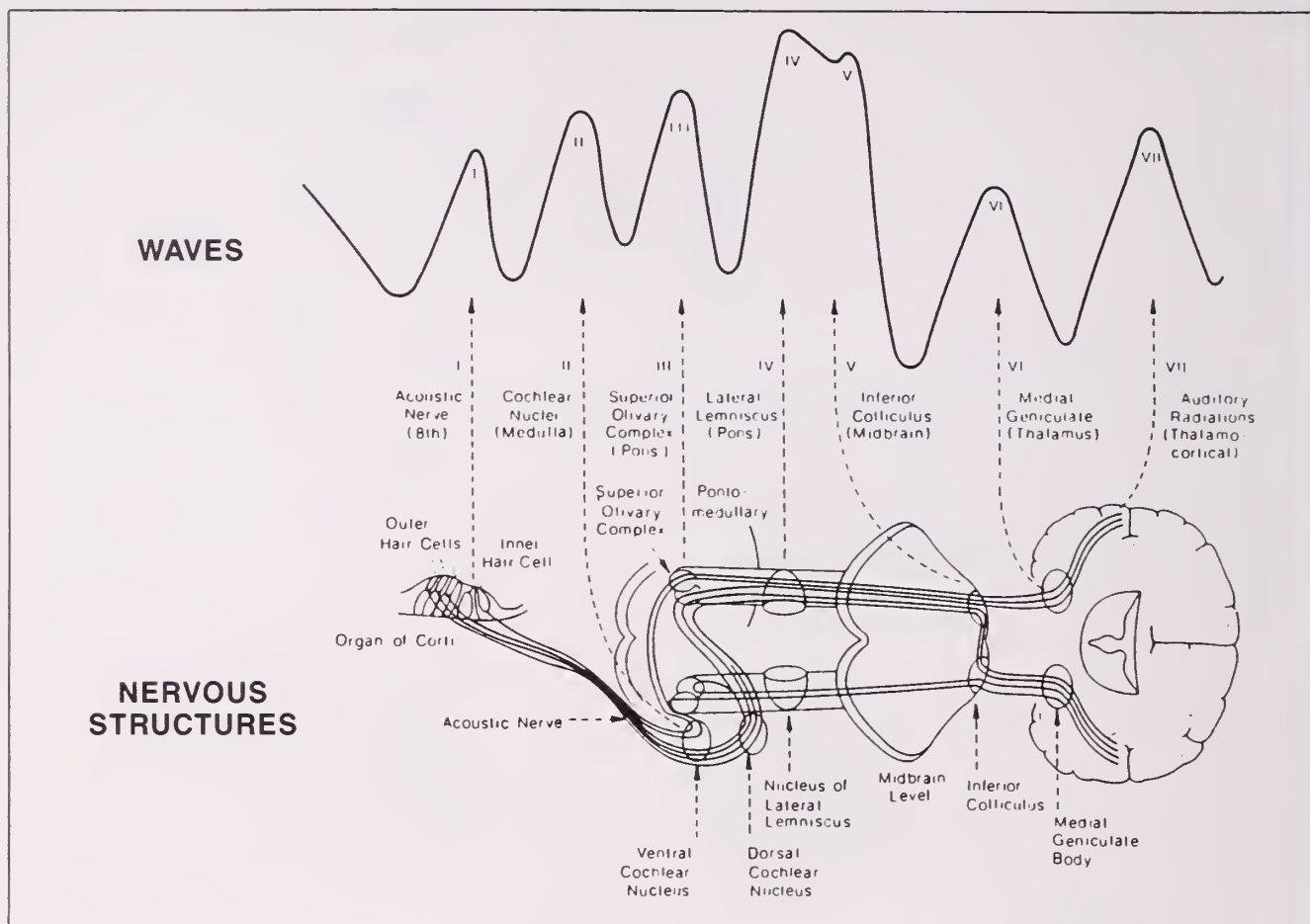
Diagnosis is made by the history, a brief neurological examination,<sup>21</sup> otologic study, and special audiologic examinations including brain stem auditory evoked responses and radiologic examination.<sup>22</sup> Rarely, a patient may have bilateral acoustic neuromas.<sup>23,24</sup> When this occurs, it is usually symptomatic of von Recklinghausen's disease.

**Radiology.** Computerized tomography, or CT scan of the head, with enhancement, detects about 95% of acoustic neuromas.<sup>2,8,20</sup> Magnetic resonance imagery (MRI), using a powerful magnet, now reliably reveals acoustic neuromas<sup>14</sup> which are still

within the internal auditory canal, and therefore subject to true surgical cure.

**BAER.** The brain stem auditory evoked response (BAER) is abnormal in about 92% of acoustic neuromas.<sup>8,14</sup> This brain stem auditory evoked response, also called brain stem evoked potential, auditory evoked response, auditory brain stem response, BAER, etc., is the electric potential recorded from the scalp at the vertex, in response to stimulation of one ear at a time by loud clicks of extremely brief duration (100 microseconds), the responses taking place within 10 milliseconds after each click. By computer averaging, these electrical potentials can be displayed and printed.

The normal response pattern consists of seven characteristic waves, each wave representing the arrival of a stimulus at a point on the auditory pathway. Wave I represents the eighth nerve; Wave II represents the cochlear nucleus in the lower brain stem, medial to the inferior cerebellar peduncle; Wave III represents the superior olive in the brain stem, etc. Figure 3 shows the correlation of anatomical structures with these waves.<sup>27</sup>



**Figure 3. Waves of Evoked Responses and Nervous Structures They Represent** (Reproduced by permission from DeWeese, David D., Saunders, William H., Schuller, David E., and Schleuning, Alexander J. *Otolaryngology—Head and Neck Surgery*, ed. 7, St. Louis, 1988, The C.V. Mosby Co.)

In persons with acoustic neuromas, who still have sufficient hearing to form these waves, about 92% show the absence or severe distortion of these waves on one side, or their delayed arrival, the latter being called increased latency.<sup>1,25</sup>

**Special Audiologic Testing.** Ordinary clinical testing of hearing during the general physical examination or the neurological examination, by having the patient detect a watch ticking, or repeat spoken words, or respond to the sound of a tuning fork, is worthless for diagnosis of acoustic neuroma and has been abandoned.<sup>10</sup> Vestibular testing is of low value for small tumors.<sup>8</sup>

Instead, special audiologic tests are used for their high predictive value: brain stem evoked response, acoustic reflex studies,<sup>8</sup> speech discrimination testing,<sup>26</sup> and tone decay studies.<sup>8</sup> A full diagnostic battery of special audiologic tests, all noninvasive, should be performed.

**Acoustic Reflex Studies.** Acoustic reflex studies are also called stapedius reflex tympanometry and immittance tympanometry. The acoustic reflex

consists of the stapedius muscle contracting, in response to a loud sound which is delivered by a small device that is placed in the external ear canal. The afferent arm of this reflex is the auditory pathway,<sup>26</sup> while its efferent arm includes the seventh or facial nerve, which innervates the stapedius muscle.

When a loud sound of extremely short duration is delivered in the external ear canal, the stapedius muscle contracts, resulting in movement of the eardrum. This movement of the eardrum is recorded by an impedance audiometer.

In normal persons, this reflex contraction persists for at least ten seconds. In persons with disease of any part of the reflex arc, such as acoustic neuroma, the duration of the reflex contraction is much shorter. About 80% of acoustic neuroma patients have abnormal acoustic reflex test results.<sup>1</sup>

**Speech Discrimination Testing.** In speech discrimination testing, an audio tape, played into earphones, presents 50 phonetically balanced one-syllable words, such as *lock, truck, bike, sun*. A normal person correctly perceives or “discriminates”

at least 45 words, or 90%. In many patients with acoustic neuroma, even when audiometric testing with pure tones is normal or near normal, and these test words are presented loudly, speech discrimination test scores are very low, often about 30%. About 65% of acoustic neuroma patients have abnormal speech discrimination results.

**Tone Decay or Auditory Fatigue.** Tone decay studies test the fatigue of any part of the auditory pathway (Fig 3). In a normal person, the steady delivery of a pure tone is perceived for many minutes before the subject becomes adapted to the tone. In patients with acoustic neuromas, or with multiple sclerosis, adaptation sets in rapidly, so that the patient cannot hear the tone for a full minute, even when it is presented loudly. About 80% of acoustic neuroma patients show some degree of tone decay.<sup>8</sup>

## CONCLUSION

The diagnosis of acoustic neuroma requires the physician to maintain a high index of suspicion with all patients having unilateral tinnitus, deafness, and imbalance. Diagnostic tests, which are now noninvasive and relatively inexpensive, can yield an early diagnosis. Early diagnosis with prompt referral not only reduces the ultimate expense, but also significantly decreases the morbidity and mortality from this tumor.



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## News from the Oklahoma State Department of Health

### Dental Services for the Elderly

The fastest growing segment of the American population is older adults — people over the age of 65. At the turn of the century, just 4% of the population held “senior citizen” status. By 1980, about 10% of the population was in this age group. It is predicted that by the year 2050, 22% — 55 million Americans — will be senior citizens.

The sizable, rapidly growing segment of society has special dental health care problems and needs, some of which are the result of common misconceptions. Many elderly Americans neglect their dental health because they assume that dental problems are an inevitable part of the aging process. This is not the case. Preventive dental care, focusing on daily brushing and flossing, regular professional care, and a well-balanced diet, can maintain dental health well into the later years.

Regular dental checkups are essential to detect changes in the oral cavity that may warrant further

attention. Some dental problems associated with the elderly are gum disease, root caries, dry mouth, and oral cancer. Many patients develop lesions on the gums from contact with dentures that no longer fit. Some patients restrict their diets to avoid discomfort and difficulty in chewing, but this can cause their nutrition to be compromised, resulting in a negative effect on their overall health.

Fortunately, the percentage of older Americans who have lost their natural teeth is decreasing, thanks to today's emphasis on preventive dentistry. A 1985-86 study by the National Institute of Dental Research found that 62.5% of persons aged 65 to 74 years had kept some or most of their natural teeth. This contrasts with a similar 1960-62 study in which only 50.6% of this group kept some teeth.

The American Dental Association continues to place special emphasis on good dental health for senior citizens. The second annual National Senior Smile Week will be observed May 15-21, 1988.

Dental health is a lifelong process, and teeth are meant to last a lifetime. With consistent dental care, Americans can keep their smiles glowing for years to come. For more information on dental care for the elderly, contact the Oklahoma State Department of Health's Dental Service, 405/271-5502. □

DISEASE	February 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	1	1
CAMPYLOBACTER INFECTIONS	10	23	17	20
ENCEPHALITIS, INFECTIOUS	0	0	1	2
GIARDIA INFECTIONS	19	28	23	30
GONORRHEA (Use ODH Form 228)	634	1113	1679	2013
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	23	54	18	29
HEPATITIS A	117	143	38	228
HEPATITIS B	30	41	22	29
HEPATITIS, NON-A-NON-B	4	7	2	7
HEPATITIS UNSPECIFIED	4	7	9	20
MEASLES (RUBEOLA)	7	7	1	0
MENINGITIS, ASEPTIC	3	7	4	9
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	1	2	2	10
MENINGOCOCCAL INFECTIONS	0	0	8	8
PERTUSSIS	0	0	9	9
RABIES (Animal)	1	4	3	11
ROCKY MOUNTAIN SPOTTED FEVER	0	0	0	0
RUBELLA	0	0	0	0
SALMONELLA INFECTIONS	22	39	21	48
SHIGELLA INFECTIONS	16	21	17	25
SYPHILIS (Use ODH Form 228)	19	32	25	31
TETANUS	0	0	0	0
TUBERCULOSIS	16	34	17	32
TULAREMIA	0	0	1	1
TYPHOID FEVER	0	0	1	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	23
BRUCELLOSIS	0
LEGIONNAIRES DISEASE	1
MALARIA	4
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	0

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# Clinical Features of HIV Infections

Siddhartha Mahanty, MBBS, and D.P. Fine, MD

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*AIDS Update is a monthly feature written by members of the Oklahoma State Medical Association's Ad Hoc Committee on AIDS or by other experts in the field.*

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**T**his article will provide an overview of clinical features of human immunodeficiency virus (HIV) infections including AIDS. The hallmark of HIV infection is depletion of CD4<sup>+</sup> (T4) lymphocyte, but the majority of clinical manifestations are due to the profound immunodeficiency resulting from this depletion, rather than to direct effects of the virus.

HIV has been associated with an acute, transient "retroviral" syndrome which occurs two to five weeks after initial infection. This syndrome resembles infectious mononucleosis, and occurs in about 10% of cases. The characteristic illness has a course of two to three weeks, with headache, arthralgia, lymphadenopathy, and maculopapular rash; antibodies to HIV appear soon after. Central nervous system (CNS) manifestations including aseptic meningitis and encephalitis have been reported with this syndrome.

The majority of patients with HIV infections are asymptomatic or have only persistent generalized lymphadenopathy (PGL). By definition, lymph nodes in PGL must be at least 1 cm in size, at two or more extrainguinal sites, without other explanation. Histologic studies reveal benign reactive follicular hyperplasia due to B cell proliferation. Disappear-

ance of nodes may occur, and benign resolution of PGL has been reported; however, node disappearance generally implies a poor prognosis. The period of seropositivity without symptoms can last for many years, perhaps indefinitely. At this point immunological and hematological tests may be normal or abnormal.

A subset of HIV-infected individuals (about 35%) develops disease which does not fulfill criteria for the diagnosis of AIDS and is referred to as AIDS-related complex (ARC). Manifestations may include fever, sweats, leukoplakia of the tongue, oral candidiasis (without involvement of the esophagus), seborrheic dermatitis, varicella zoster infection/reactivation, and unexplained hepatomegaly. Patients with ARC (as well as those with AIDS) often acquire opportunistic infections other than those that define AIDS; among them are tuberculosis, recurrent *Salmonella* and *Campylobacter* infections, and pneumonia due to organisms such as *Streptococcus pneumoniae* and *Haemophilus influenzae*. Most, if not all, patients with ARC probably eventually develop AIDS.

The most severe manifestation of HIV infection — AIDS — probably develops in about 6% of infected individuals per year. As the name implies, it is a syndrome rather than a disease entity and is defined by the occurrence of specific opportunistic infections and neoplasia.

*Pneumocystis carinii* pneumonitis or Kaposi's sarcoma (KS) are initial presentations of AIDS in about 75% of patients. Other protozoa also frequently cause infection, particularly *Toxoplasma gondii*

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From the Infectious Diseases Section, Department of Medicine, University of Oklahoma Health Sciences Center, Oklahoma City, OK 73104.

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which causes encephalitis and brain abscesses. Viral infections are also common, particularly cytomegalovirus, which causes intermittent viremia in about 50% of AIDS patients, and herpes simplex virus, which can produce severe, ulcerating mucocutaneous lesions. Fungal infections are universal in these patients, especially mucosal candidiasis involving the mouth or esophagus. *Cryptococcus neoformans* is a prominent cause of meningitis. Disseminated infections due to *Histoplasma capsulatum* or *Mycobacterium avium* are common.

KS is usually limited to the skin and mucous membranes and is uncommonly the ultimate cause of death. Visceral involvement (particularly lungs and gastrointestinal tract) may, however, be a serious problem. In addition to KS, high-grade B cell non-Hodgkins lymphomas also occur unusually frequently in AIDS, often involving CNS or bone marrow.

Neurological manifestations of a wide variety occur commonly, affecting between 30% and 60% of patients with AIDS. Neurological problems directly attributable to HIV (excluding those produced by opportunistic infections or lymphoma) range from barely detectable defects in higher mental function to overt subacute meningitis or encephalitis, the most common being progressive dementia with motor and gait abnormalities. Peripheral neuropathies may be debilitating. □

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## "Let's Talk About AIDS"

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### Succeeds Crosthwait

## Ray V. McIntyre, MD, assumes OSMA presidency

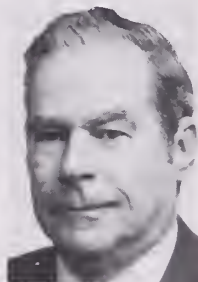
Ray V. McIntyre, MD, a Kingfisher family physician, was inaugurated as the 83rd president of the Oklahoma State Medical Association on May 6 during the OSMA President's Banquet at Shangri-La Resort, near Afton, Okla.

Dr McIntyre, who will serve for one year, succeeds M. Joe Crosthwait, MD, a family physician from Midwest City.

Born in Tyron, Okla, the new OSMA president is a graduate of then Central State College, Edmond, and the University of Oklahoma College of Medicine. He is a board certified family physician.

Before beginning his medical studies, Dr McIntyre served in the US Army's 45th Division in the European Theater during World War II.

Dr McIntyre has long been active in organized medicine. He has been president of the Kingfisher




County Medical Society, vice-chairman of the OSMA Board of Trustees, and president of the Oklahoma City District of the Oklahoma Academy of Family Practice.

The Kingfisher physician is a founding member of the Physicians Liability Insurance Company (PLICO) Board of Directors. He has served as the only chairman of the PLICO Loss Prevention Committee since the company's inception.

Dr McIntyre also is a former president of the Kingfisher Lion's Club.

He and his wife, Kathryn, have four children and two grandchildren. Sons are Glen, a museum curator in Kingfisher; Dale, a metallurgic engineer living in Houston; and Floyd, a Massachusetts family physician. Daughter Ann Carol is a pharmacist in California.

Medical leadership runs in the McIntyre family. Dr McIntyre's brother, John A. McIntyre, MD, Enid, served as OSMA president in 1982-83. 


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## *Applications for state medical licenses must be in by June 30*

June 30, 1988, is the last day on which a license to practice medicine and surgery in the State of Oklahoma may be renewed to permit continuation of practice for the subsequent fiscal year (July 1, 1988—June 30, 1989).

Renewal applications have been mailed to each allopathic physician currently licensed to practice in Oklahoma, using the last known mailing address of record. If you have not received your application, please contact the Office of the Secretary, Oklahoma State Board of Medical Licensure and Supervision (formerly the Oklahoma State Board of Medical Examiners) at (405) 848-6841.

Oklahoma medical licenses unrenewed as of July 1, 1988, will be placed in an inactive status for sixty (60) days then suspended for failure to renew. Practice without a current, valid license is a misdemeanor. *Reactivation* of an *inactive* license is by payment of the renewal fee of \$200.00 plus submittal of the renewal application.

*Reinstatement* of a license *suspended for failure to renew* (those whose licenses have not been renewed by August 29, 1988) is by application for reinstatement and fee of \$300.00. The District Attorney is notified of all physicians whose licenses are suspended for failure to renew. 



## Inadequate training and equipment

### ***Good samaritans on airplanes can't replace trained crews***

In-flight airline passenger deaths, although rare, do occur, but current on-board emergency medical equipment and crew training don't appear adequate to deal with the problem, a preliminary study has concluded.

The report, by Richard O. Cummins, MD, MPH, MSc, of the University of Washington, Seattle, and colleagues, says sudden cardiac death among apparently healthy people seems to be the major cause of in-flight deaths. The authors call for "programs to train cabin personnel in the skills of basic cardiopulmonary resuscitation (CPR) and in the use of automatic external defibrillators," concluding that airlines can't count on the presence of doctors aboard airplanes to handle medical emergencies.

Although anecdotal reports of in-flight deaths among airline passengers are not uncommon, objective data are rare, the authors say. To gauge the

extent of the problem, the new study reviewed information reported to the International Air Transport Association (IATA), a worldwide airline industry group, on in-flight deaths during commercial air travel between 1977 and 1984.

Of the 120 airlines belonging to the IATA, which carry 50% to 60% of the world's scheduled international and domestic air traffic, 42 carriers reported a total of 577 deaths for the eight-year period studied — an average of 72 per year. In-flight deaths occurred at a rate of 0.31 per million passengers, or 25.1 per million departures, "a vanishingly small rate," the authors note. "In view of the hundreds of millions of passengers who fly each year, the average of 72 deaths per year reported by IATA-member carriers is miniscule."

Still, they say, "deaths during commercial air travel do occur; they cannot be labeled a nonexistent

*(continued)*



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## HIV infections become reportable on June 1

Beginning in June 1988, human immunodeficiency virus (HIV) infection will be an officially reportable condition in Oklahoma. The State Board of Health adopted rules and regulations to that effect at its January meeting, and the regulation has been signed by Governor Henry Bellmon.

HIV infection is defined as laboratory evidence of HIV antibody, antigen, or a positive viral culture. If confirmatory testing was done (ie, Western blot assay), only confirmed positive antibody tests are reportable. That is, a person whose result is ELISA positive but Western blot negative is not reportable. However, if confirmatory testing was not done, then screening test (ie, ELISA) positivity is reportable. Retroactive reporting (ie, tests done before May 31, 1988) is not required, but will be accepted if physicians request follow-up for the patient.

Reporting of HIV infections is done for three major reasons: (1) to better monitor the HIV/AIDS epidemic transmission patterns in Oklahoma; (2) to assist in assuring that complete counseling about HIV infection is available to HIV-positive persons, including information about the test, the modes of

transmission, the need for follow-up, and the methods of prevention of spread; (3) to assist in partner notification (of sexual and needle-sharing partners), so that these partners can receive counseling and testing. The Oklahoma State Department of Health (OSDH) has several HIV counseling and testing sites in the major metropolitan areas of the state where persons can receive these services at no charge. Physicians may feel free to refer patients to one of these sites for testing and counseling. More information about these sites will be sent to physicians in the near future, or can be obtained by calling the AIDS Division of OSDH.

The OSDH has developed reporting forms which will be sent to all licensed physicians, as well as hospitals and clinical laboratories. Reporting information includes name, date of birth, sex, race, risk characteristics, and need for follow-up counseling. Reports will be processed by epidemiology personnel in the AIDS Division at OSDH; questions about the reporting process can be directed to them at (405) 271-4636. 

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## Good samaritans (continued)


problem." Most of those who died were male and middle-aged, yet 77% reported no health problems prior to travel. Sudden, unexpected cardiac death appears to be the major cause of death during air travel, the authors say, causing 63% of the deaths in apparently healthy people. Overall, more than half the deaths reported appeared cardiac-related.

The Federal Aviation Administration requires all commercial common carriers to maintain a specific medical aid kit separate from regular first aid boxes, the authors say. These special kits contain injectable dextrose, epinephrine, and diphenhydramine (the last two mainly for asthma and allergies), nitroglycerin tablets (for angina), a stethoscope, blood pressure monitor, and oral airways.

However, cabin personnel are not required to know how to use this equipment, the authors note. For this, they say, airlines, at least in the United States, "remain dependent on 'good samaritan' health professionals who are asked to come forward

in the event of an in-flight emergency." But such reliance may be excessive, they add, noting doctors offered medical assistance in only 43% of the deaths reported in the survey.

Would more advanced on-board medical equipment have made a difference? While calling this an impossible question to answer, the authors suggest that, "with the notable exception of cardiac defibrillators, little benefit would ensue from a policy of more sophisticated on-board equipment for physicians to use." But noting the high frequency of presumed sudden cardiac fatalities among the reported passenger deaths, the authors suggest "a more practical approach, with more likelihood of success . . . training flight attendants to a higher skill level to deal with emergencies (basic cardiopulmonary resuscitation) and to operate the new technology of automatic external defibrillators."

The report appeared in the April 1 issue of the *Journal of the American Medical Association*. 



## Hospitals' HIV testing policies vary widely

US hospitals vary widely in their policies and practices involving testing for the AIDS-causing human immunodeficiency virus (HIV), according to a new study.

This wide diversity of policies and practices indicates considerable uncertainty about the role of HIV antibody testing within hospitals at both national and state levels, say the study's authors, Keith Henry, MD, and colleagues of the St Paul-Ramsey Medical Center and the University of Minnesota Medical School, Minneapolis. The findings underscore the need for a consensus to help guide hospitals toward the optimum use of HIV testing, they say.

In 1987, the authors surveyed 189 (94.5%) of the hospitals in the United States with infectious disease fellowship training (US ID-teaching hospitals) and 160 (94%) of Minnesota's short-term care hospitals. Only 49% of the US ID-teaching hospitals and 37% of the Minnesota hospitals had a policy governing the ordering of HIV tests. In addition, the survey showed that only 47% of the US ID-teaching hospitals and 39% of the Minnesota hospitals had a specific educational program on HIV testing for physicians.

The survey also found marked variety in how the hospitals handled test results and patient consent. Forty percent of the US ID-teaching hospitals gave HIV test results only to the ordering physician, while 44% entered test results in patient records — which could increase the chance of patient confidentiality being compromised. Although some states, such as California, require written patient consent before testing, 34% of the US ID-teaching hospitals and 57% of the Minnesota hospitals rarely obtained such consent before testing, the report says.

The study also revealed marked differences in the provision of risk-reduction counseling before or after HIV testing. Only 58% of the US ID-teaching

hospitals and only 9% of Minnesota hospitals usually provided the patients they tested with risk-reduction information. "(HIV) testing, particularly when focused on high-risk behavior persons, represents an opportunity to counsel the patient on risk reductions," the authors write. "This type of counseling can be labor intensive and, therefore, costly, but hospitals intent on contributing to limiting HIV transmission should develop and fund this service."

In an accompanying editorial, Theodore C. Eickhoff, MD, of the University of Colorado School of Medicine, Denver, calls for a rational HIV testing policy to serve the needs of hospitals and patients. Although a single national policy for all US hospitals probably is unrealistic, "it is possible to define several overriding principles that must be addressed as individual hospitals develop new policies for HIV antibody testing or reevaluate existing policies," he says.

Hospital HIV-testing policy must support a defined goal for the health of the patient, his or her contacts, or the public health, he says. Informed consent must be obtained from patients before testing and the confidentiality of test results maintained. Counseling and guidance must always accompany testing. "Behavioral modification is, after all, the major goal of any HIV testing program, and behavioral change is unlikely to occur in the absence of professional counseling and guidance."

In addition, health and hospital care must in no way be conditional on whether the patient consents to being tested or on the result of the test. "To provide less than unconditional care is morally indefensible and would represent a tragic break from the ethical traditions of medicine," Eickhoff says.

Eickhoff also argues against mandatory testing of all hospital admissions, including substantial numbers of low-risk patients, because it not only creates ethical and legal problems, but it poorly serves a cost-effective pursuit of the public health goal of case identification. "Numerous other issues can be expected to arise in the context of HIV antibody testing policies, but rational and ethical decisions can be made in most instances if these five principles are thoughtfully addressed."

The study results were published in the March 25 issue of *Journal of the American Medical Association*.

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# BOOK SHOP

**Colonic Neoplasms.** By Hans Elias, MD. Padua, Italy: Piccin Nuova Libreria, S.p.A., 1985, 176 pp, with 170 figures, price not given.

Dr Elias has a long and distinguished career in morphology and biology. He has contributed extensively in stereology, the technique of applying mathematics to tissue geometry. Many of our data on the relationships of surface area, volume, cell-to-cell relationships, and the effect of cell cycle on cell shape have derived from Dr Elias's work. The present volume continues his tradition of careful histology work in three dimensions and attempts to extend the data into an understanding of pathologic reactions over time.

This volume is amply illustrated, with high quality black and white photomicrographs. Many of the prints have an accompanying photomicrometry scale. The inclusion of the scales makes it possible to confirm Dr Elias's contentions about geometric relations. The typesetting is clear, on high quality, heavy paper. The book is a pleasure to handle and read.

The points of this volume are:

I. Colonic polyps are not invariable precursors of colonic cancers, despite the claims to the contrary of many textbooks.

II. Most colonic cancers are well differentiated, in both their primary and metastatic sites, despite their aggressive behavior. They have modest nuclear:cytoplasmic ratios, open rather than hyperchromatic nuclei, and secretory epithelium with microvilli. Cancerous aggression reflects some quality other than the anaplasia.

III. Nuclei may synthesize DNA, and proliferate amitotically. Such a phenomenon would explain continued carcinoma growth without obvious mitoses.

IV. Nuclear fragments of carcinomatous cells can embolize, and act as transfective cancer agents.

V. Tumor cells transform adjacent normal cells, recruiting them into the cancerous way of life and conferring upon the recruits the ability to transform *their* neighbors, in turn.

Points I through III are not at issue, and the data adduced in the book are adequate support for these theses. Point IV must be viewed as speculative, a



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good inference on sketchy data, in need of direct proof. It is a potentially useful alternative/supplement to the viral infection theory of cancer. Dr Elias spends great effort, emotion, and space on point V. The photomicrographs do not prove this thesis. The data are suggestive that host cells are transformed, with hyperplasia and altered differentiation. . . so that liver cords seem to be transformed into colonic

cells by adjacent colonic carcinoma. This phenomenon, in many organs, has been commented upon by many distinguished pathologists. It is a basic tenet in neuropathology, where it is used to explain the growth and maturation of cerebral astrocytomas. The critical experiments haven't been done, however.

In sum, Dr Elias has written a pleasurable, provocative, and well-illustrated book. He demands that we attend to some alternative concepts on carcinogenesis. He uses a common human cancer, argues from observations on human tissue, and pleads for intellectual flexibility. It is a book for thought.

*Robert M. Shuman, MD  
Oklahoma City*

## IN MEMORIAM

### 1987

<i>Paul Lewis Nave, MD</i>	<i>March 26</i>
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<i>Lawrence Edward Silvey, MD</i>	<i>April 9</i>
<i>Victor Gary Anderson, MD</i>	<i>April 10</i>
<i>Edgar W. Young, Jr., MD</i>	<i>April 12</i>
<i>Paul Newman Atkins, Jr., MD</i>	<i>April 20</i>
<i>John Wesley Williams, MD</i>	<i>May 16</i>
<i>John Jerome Coyle, MD</i>	<i>May 21</i>
<i>J. C. Rogers, MD</i>	<i>May 22</i>
<i>Scott Allen Morris, MD</i>	<i>May 24</i>
<i>Gladys Christine Smith, MD</i>	<i>May 27</i>
<i>John Ronald Watson, MD</i>	<i>June 14</i>
<i>Thomas Arthur Hosty, MD</i>	<i>June 17</i>
<i>Dan Cross Galloway, MD</i>	<i>July 12</i>
<i>Donald Owen Walker, MD</i>	<i>July 21</i>
<i>Cecil Reid Reinstein, MD</i>	<i>August 14</i>
<i>Alwin Marshal Clarkson, MD</i>	<i>September 1</i>
<i>Rex Elmer Kenyon, MD</i>	<i>September 16</i>
<i>Charles P. Bondurant, Jr., MD</i>	<i>October 12</i>
<i>James C. Smith, Jr., MD</i>	<i>December 30</i>

### 1988

<i>Charles Stewart Cunningham, MD</i>	<i>January 1</i>
<i>Charles Wallace Coyner, MD</i>	<i>January 4</i>
<i>Glen Franklin Wade, MD</i>	<i>January 12</i>
<i>Frank Cornwell Lattimore, MD</i>	<i>January 30</i>
<i>Leo Lowbeer, MD</i>	<i>February 3</i>
<i>Joseph Norman Kramer, MD</i>	<i>February 16</i>
<i>Eugene Richard Flock, MD</i>	<i>February 17</i>
<i>Jay P. Irby, MD</i>	<i>February 25</i>
<i>James William Finch, MD</i>	<i>March 4</i>
<i>John Junior Donnell, MD</i>	<i>March 7</i>

## DEATHS

### John Junior Donnell, MD 1911 - 1988

Oklahoma City native John J. Donnell, MD, died March 7, 1988, in his hometown. A 1943 graduate of the University of Oklahoma College of Medicine, he practiced internal medicine and cardiology in Oklahoma City for 35 years. He was also an associate clinical professor at the OU College of Medicine. Dr Donnell served in the US Navy Reserve in World War II and in the Korean conflict.

### James William Finch, MD 1908 - 1988

OSMA Life Member J. William Finch, MD, died March 4, 1988. An internist, Dr Finch was graduated from the University of Oklahoma College of Medicine in 1931. He began his practice of medicine in Sentinel the following year, moving to Hobart four years later. He also served as a visiting lecturer and preceptor at his alma mater.

### Jay P. Irby, MD 1903 - 1988

General practitioner J. P. Irby, MD, Norman, died February 25, 1988. Dr Irby was a 1928 graduate of the University of Oklahoma College of Medicine and a Life Member of the OSMA. He practiced in Alva until his retirement in 1973, at age 70.

**The Chief: Doctor William Osler.** By R. Palmer Howard. Canton, MA: Science History Publications, 1984, pp 194, illus, \$20.00.

The author of this book, R. Palmer Howard, was formerly chairman of the History of Medicine Department at the University of Oklahoma Health Sciences Center. He has provided us with an interesting and useful book about William Osler.

William Osler continues as an important presence among medical personnel in this and other countries. Born in Canada, he was graduated from McGill University Medical School and appointed professor of medicine at McGill at an early age. He then joined the University of Pennsylvania and, after a period of years there, became one of the original faculty at the new Johns Hopkins Medical School in Baltimore. For the last 13 years of his life he was Regius Professor of Medicine at Oxford. Osler had numerous talents — splendid clinician, author of a classic textbook, stimulating medical educator and bibliophile — the effects of which persist to the present, and he continues to be widely admired.

This small book is a story of the relationships between the Howard and Osler families for three generations. The book is based on prolific correspondence between the two families, beginning some 100 years ago; most of it has not been published previously. R.P. Howard was professor of medicine at McGill when Osler was a student; he became Osler's great friend. After Howard's death, Osler assumed an important parental influence for the Howard children; he became godfather to Campbell Howard, R.P. Howard's son, who achieved a distinguished medical career as professor of medicine at the University of Iowa and later at McGill.

Revere Osler, the only son of Sir William and Grace Osler, became godfather to Campbell Howard's son. The author, Palmer Howard, is the son of Campbell Howard and the grandson of Professor R.P. Howard.

Palmer Howard has provided us with a very

interesting account of various facets of Osler's life. The most frequently cited letters are those from Osler to the author's father, Campbell P. Howard, and to Campbell's sister, Marjorie Howard Futch. Through this correspondence, the Osler legend is enriched with personal happenings, attitudes, and detail. A great deal of information about the days in Oxford is provided, and we learn much more about the Howard family and the relationship with the Oslers.

The book describes in detail many of the important episodes in Osler's life that have not been given full treatment in the classic biography *The Life of Sir William Osler* by Harvey Cushing.

The text is complimented by some 50 or so photographs, most not previously published. They are primarily snapshots of the Osler, Howard, and Futch families.

This small book is very readable and provides us with certain new aspects of Sir William Osler as well as his and the Howard families.

Harris D. Riley, Jr., MD  
Oklahoma City

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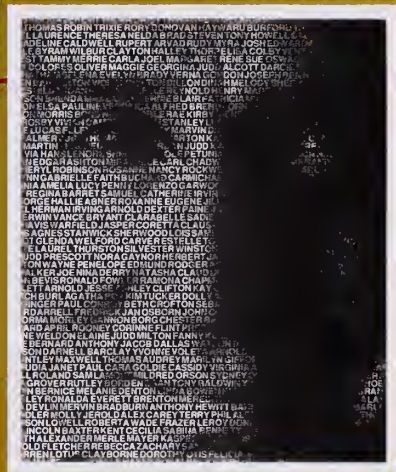
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 LONG ACTING CAPSULES  
 60, 80, 120, 160 mg

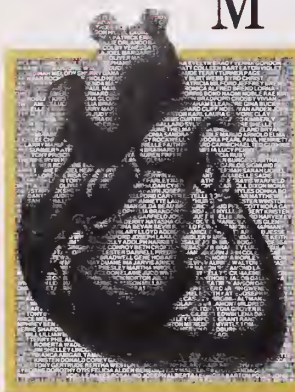
# The one you know best keeps looking better

Please see next page for brief summary of prescribing information.

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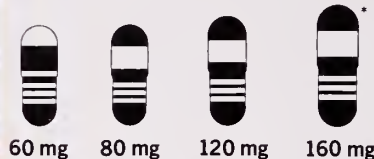


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60, 80, 120, 160 mg

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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

## INDERAL<sup>®</sup> LA brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE.** **Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS.** **CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema)—PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY:** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOLYCEMIA:** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS:** Beta blockade may mask certain clinical signs of hyperthyroidism. Therefore abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing T<sub>4</sub> and reverse T<sub>3</sub>, and decreasing T<sub>3</sub>.

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported in which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS.** **GENERAL:** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be told that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return or increased intraocular pressure.

**CLINICAL LABORATORY TESTS:** Elevated blood urea levels in patients with severe heart disease; elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS:** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The additive catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope, attack or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels of both drugs.

Antipyrene and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected T<sub>3</sub> concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:** Long-term studies in animal have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg/day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY:** Pregnancy Category C. Inderal has been shown to be embryotoxic in animal studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS:** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**PEDIATRIC USE:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dream appear dose related.

**Gastrointestinal:** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching sore throat, laryngospasm and respiratory distress.

**Respiratory:** Bronchospasm.

**Hematologic:** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin serous membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION—Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed to full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS—Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE—Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS—80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE—**At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

## Reference:

1. Data on file, Ayerst Laboratories.

D7295/188

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**FAMILY PRACTICE — TULSA, OKLAHOMA — SEEKING** BC family physician to assume established practice. OB optional. Shared call coverage. Practice location adjacent to full service 221-bed, family practice-oriented hospital. Competitive incentive packages available. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**RADIOLOGY — DIAGNOSTIC RADIOLOGIST — IMMEDIATE** need for recently trained, BC physician to associate with established radiology group serving regional medical center for Southeast Oklahoma and Northeast Texas (approx. 150,000 service area population). All modalities, including MRI and interventional radiology. Family-oriented community of 27,000; strong economy; good schools. Excellent incentive package; early partnership. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

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**OTHER OPPORTUNITIES — OTOLARYNGOLOGIST — IMMEDIATE** opportunity for BE/BC physician with regional medical center serving 150,000 population in Southeast Oklahoma and Northeast Texas. Most sub-specialties represented; 175-bed hospital. Quality lifestyle in area with strong, diversified economy; good schools. Shared call coverage; incentive package available. Contact: Physician Resource Network, P.O. Box 37102; Fort Worth, Texas 76117; 817/595-1128.

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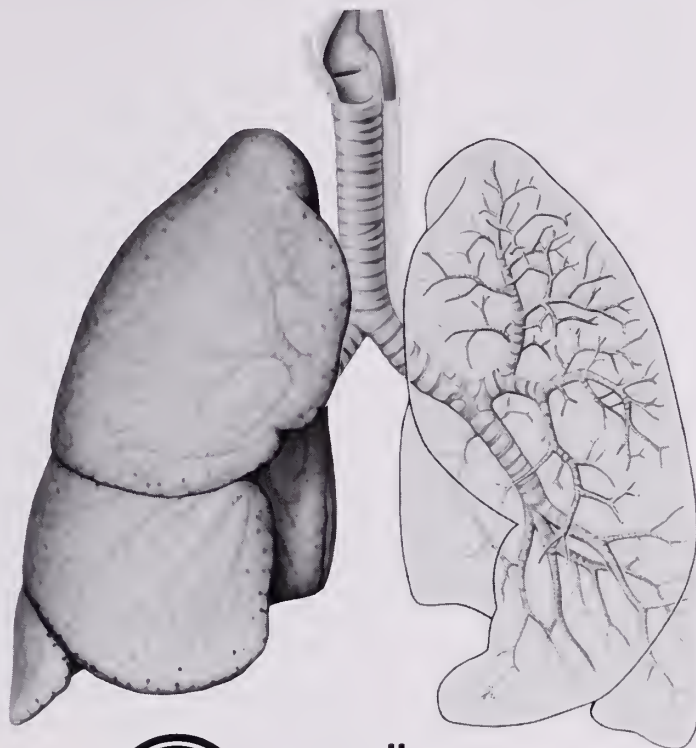
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*Haemophilus influenzae* and *Streptococcus pneumoniae*  
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**Note:** Ceclor is contraindicated in patients with known allergy to the cephalosporins and should be given cautiously to penicillin-allergic patients.

Penicillin is the usual drug of choice in the treatment and prevention of streptococcal infections, including the prophylaxis of rheumatic fever. See prescribing information.

## **Ceclor<sup>®</sup>** (ceclor)

**Summary.** Consult the package literature for prescribing information.

**Indication:** Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:**  
Known allergy to cephalosporins.

**Warnings:**  
CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients. Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

## **Precautions:**

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.
- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

**Adverse Reactions:** (percentage of patients)  
Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%.
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] or the above skin manifestations accompanied by arthritis/arthritis and, frequently, fever): 1.5%; usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.
- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nerv-

ousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.

- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.

## **Abnormalities in laboratory results of uncertain etiology**

- Slight elevations in hepatic enzymes.
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis; elevations in BUN or serum creatinine.
- Positive direct Coombs' test.
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clinitest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

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Additional information available to the profession on request from Eli Lilly and Company, Indianapolis, Indiana 46285  
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# All alcoholics are drunks.

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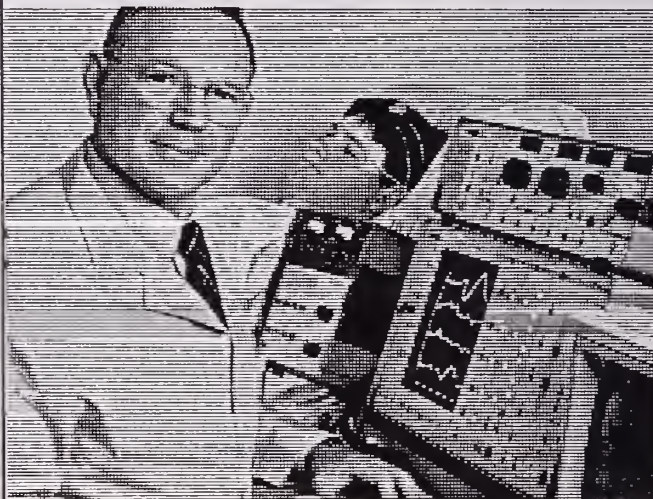
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Before prescribing, see complete prescribing information in SK&F LAB CO. literature or PDR. The following is a brief summary.

**Contraindications:** There are no known contraindications to the use of 'Tagamet'.

**Precautions:** While a weak antiandrogenic effect has been demonstrated in animals, 'Tagamet' has been shown to have no effect on spermatogenesis, sperm count, motility, morphology or in vitro fertilizing capacity in humans.

In a 24-month toxicity study in rats at dose levels approximately 9 to 56 times the recommended human dose, benign Leydig cell tumors were seen. These were common in both the treated and control groups, and the incidence became significantly higher only in the aged rats receiving 'Tagamet'.

Rare instances of cardiac arrhythmias and hypotension have been reported following the rapid administration of 'Tagamet' HCl (brand of cimetidine hydrochloride) injection by intravenous bolus.

Symptomatic response to 'Tagamet' therapy does not preclude the presence of a gastric malignancy. There have been rare reports of transient healing of gastric ulcers despite subsequently documented malignancy.

Reversible confusional states have been reported on occasion, predominantly in severely ill patients.

'Tagamet' has been reported to reduce the hepatic metabolism of warfarin-type anticoagulants, phenytoin, propranolol, chlordiazepoxide, diazepam, lidocaine, theophylline and metronidazole. Clinically significant effects have been reported with the warfarin anticoagulants; therefore, close monitoring of prothrombin time is recommended, and adjustment of the anticoagulant dose may be necessary when 'Tagamet' is administered concomitantly. Interaction with phenytoin, lidocaine and theophylline has also been reported to produce adverse clinical effects.

However, a crossover study in healthy subjects receiving either 'Tagamet' 300 mg. q.i.d. or 800 mg. h.s. concomitantly with a 300 mg. b.i.d. dosage of theophylline (Theo-Dur®, Key Pharmaceuticals, Inc.),

demonstrated less alteration in steady-state theophylline peak serum levels with the 800 mg. h.s. regimen, particularly in subjects aged 54 years and older. Data beyond ten days are not available. [Note: All patients receiving theophylline should be monitored appropriately, regardless of concomitant drug therapy.]

Lack of experience to date precludes recommending 'Tagamet' for use in pregnant patients, women of childbearing potential, nursing mothers or children under 16 unless anticipated benefits outweigh potential risks; generally, nursing should not be undertaken in patients taking the drug since cimetidine is secreted in human milk.

**Adverse Reactions:** Diarrhea, dizziness, somnolence, headache, rash. Reversible arthralgia, myalgia and exacerbation of joint symptoms in patients with preexisting arthritis have been reported. Reversible confusional states [e.g., mental confusion, agitation, psychosis, depression, anxiety, hallucinations, disorientation], predominantly in severely ill patients, have been reported. Gynecomastia and reversible impotence in patients with pathological hypersecretory disorders receiving 'Tagamet', particularly in high doses, for at least 12 months, have been reported. Reversible alopecia has been reported very rarely. Decreased white blood cell counts in 'Tagamet'-treated patients [approximately 1 per 100,000 patients], including agranulocytosis [approximately 3 per million patients], have been reported, including a few reports of recurrence on rechallenge. Most of these reports were in patients who had serious concomitant illnesses and received drugs and/or treatment known to produce neutropenia. Thrombocytopenia [approximately 3 per million patients] and a few cases of aplastic anemia have also been reported. Increased serum transaminase and creatinine, as well as rare cases of fever, interstitial nephritis, urinary retention, pancreatitis and allergic reactions, including hypersensitivity vasculitis, have been reported. Reversible adverse hepatic effects, cholestatic or mixed cholestatic-hepatocellular in nature, have been reported rarely. Because of the predominance of cholestatic features, severe parenchymal injury is considered highly un-

likely. A single case of biopsy-proven periportal hepatic fibrosis in a patient receiving 'Tagamet' has been reported.

**How Supplied:** Tablets: 200 mg. tablets in bottles of 100; 300 mg. tablets in bottles of 100 and Single Unit Packages of 100 [intended for institutional use only]; 400 mg. tablets in bottles of 60 and Single Unit Packages of 100 [intended for institutional use only], and 800 mg. Tiltab® tablets in bottles of 30 and Single Unit Packages of 100 [intended for institutional use only].

**Liquid:** 300 mg./5 ml., in 8 fl. oz. (237 ml.) amber glass bottles and in single-dose units (300 mg./5 ml.), in packages of 10 [intended for institutional use only].

**Injection:** Vials: 300 mg./2 ml. in single-dose vials, in packages of 10 and 30, and in 8 ml. multiple-dose vials, in packages of 10 and 25.

**Prefilled Syringes:** 300 mg./2 ml. in single-dose prefilled disposable syringes.

**Plastic Containers:** 300 mg. in 50 ml. of 0.9% Sodium Chloride in single-dose plastic containers, in packages of 4 units. No preservative has been added.

**ADD-Vantage® Vials:** 300 mg./2 ml. in single-dose, ADD-Vantage® Vials, in packages of 25.

Exposure of the premixed product to excessive heat should be avoided. It is recommended the product be stored at controlled room temperature. Brief exposure up to 40°C does not adversely affect the premixed product.

'Tagamet' HCl (brand of cimetidine hydrochloride) injection premixed in single-dose plastic containers is manufactured for SK&F Lab Co. by Travenol Laboratories, Inc., Deerfield, IL 60015.

\* ADD-Vantage® is a trademark of Abbott Laboratories

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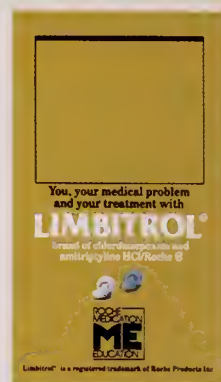
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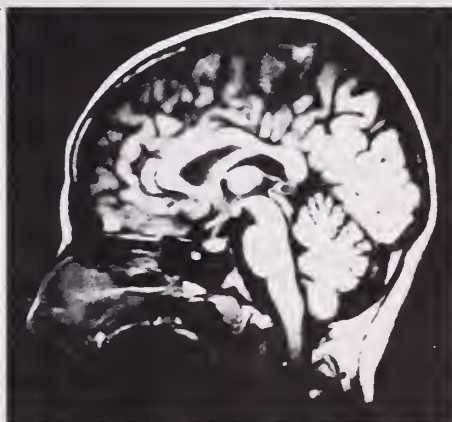
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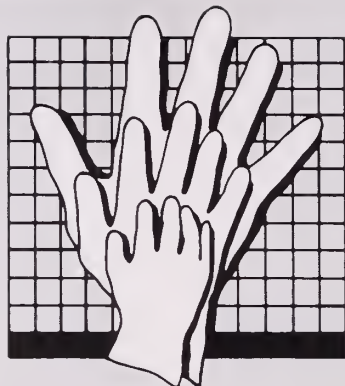
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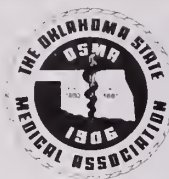
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Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

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## THE LAST WORD

■ **George H. Hulsey, MD**, Norman family practitioner, has been named Conservationist of the Year by the Oklahoma Wildlife Federation. He and other award winners were honored at a banquet on March 5 in Oklahoma City. Dr Hulsey was commended for his help in leading the federation through some of its major battles to conserve Oklahoma's timberland, free-flowing rivers, and clean environment. He is a vice chairman of the National Wildlife Federation Board of Directors and has been a leader on issues such as the Alaska Bill and international conservation.

■ **"Let's Talk About AIDS,"** the latest brochure in the OSMA's Medical Update series, is now available for distribution. Members interested in obtaining copies of the free brochure should contact Susan Meeks at OSMA headquarters, 405-843-9571 or 1-800-522-9452.

■ **OMPAC, the Oklahoma Medical Political Action Committee**, is seeking support for the campaign of Jerry Schenken, MD, a Nebraska pathologist and member of the AMA Board of Trustees. Dr Schenken is currently running for a seat in the US Congress. The seat in the 2nd Congressional District is being vacated by Hal Daub, now running for the US Senate. Personal checks should be made payable to "Jerry Schenken for Congress" and mailed to 601 Northwest Expressway, Oklahoma City, OK 3118.

■ **The OSMA JOURNAL continues to count on** readers for much of its state news and Last Word items, and submissions are greatly appreciated. Stories of interest to or about Oklahoma physicians should be directed to the JOURNAL's editorial office, 601 Northwest Expressway, Oklahoma City, OK 73118. The deadline, or closing date, for any particular issue is the first day of the preceding month; contributors are asked to keep this in mind when preparing advance notices of meetings and seminars.

■ **Cryosurgery can sharply reduce the risk of** visual loss in retinopathy of prematurity (ROP), a disorder causing blindness in 2,600 premature infants a year, preliminary results of a study in April's *Archives of Ophthalmology* say. The multicenter study, by the Cryotherapy for Retinopathy of Prematurity Cooperative Group and the National Eye Institute, Bethesda, Md, looked at 172 premature

babies with advanced ROP. Researchers treated one of each baby's eyes with cryotherapy — briefly freezing a portion of the eye's surface. This causes a line of scar tissue to form inside the eyeball, halting the progression of ROP. After three months follow-up, 43% of the untreated eyes showed progression of ROP, versus only 22% of the treated eyes. There were no unexpected complications. "These data support the efficacy of cryotherapy in reducing by approximately one-half the risk of unfavorable retinal outcome from threshold ROP," concludes the report.

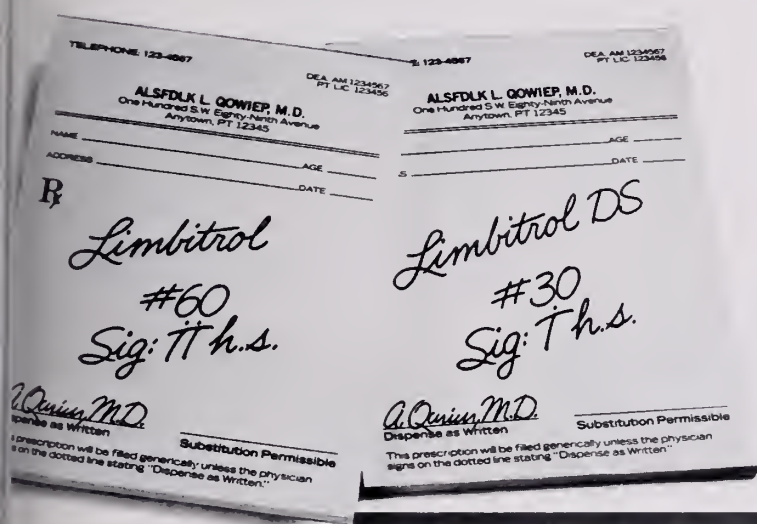
■ **The "Questions and Answers" section of the** April 1 *Journal of the American Medical Association* reviews whether women should regularly donate blood early in pregnancy for their own use in the event of, say, a cesarean section or a bleeding problem. Toby L. Simon, MD, of the University of New Mexico School of Medicine and United Blood Services, Albuquerque, says there is not enough evidence to support the benefit of such routine autologous donation. Studies suggest "very few of the women who donate their own blood prior to delivery will need it," Simon reports. Such donations might be reasonable if women likely to need such transfusions could be identified and could safely donate in the month prior to delivery, but "a more rewarding effort would be to restrict obstetric transfusions carefully to those cases where they are absolutely necessary. . . . This should decrease the frequency of transfusion to a point where predelivery donations would rarely be indicated," says Simon.

■ **Ferrets are increasingly popular pets, but a** report in the April 1 *Journal of the American Medical Association* says they are not suitable for families with small children. John W. Paisley, MD, and Brian A. Lauer, MD, of the University of Colorado School of Medicine, Denver, describe three infants, aged 6 weeks to 4 months, who suffered severe facial injuries in unprovoked attacks by pet ferrets. The ears of two of the children were bitten off and reconstructive surgery was required, the authors say, noting two of the children were asleep in their cribs when they were bitten. "Physicians should be aware that ferrets may unpredictably injure infants and that no effective rabies vaccine for ferrets is yet available," warn the authors, who note that one recent estimate suggests that more than 50,000 ferrets are sold yearly in the United States and more than one million are kept as pets. J



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**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100; Prescription Paks of 50.



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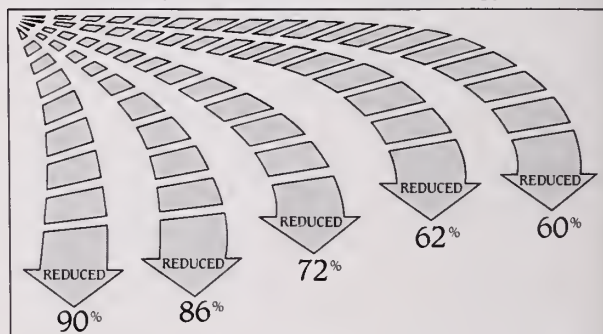
# See Improvement In The First Week...<sup>1</sup>

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose<sup>1</sup>
- ➡ First-week reduction in somatic symptoms<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy\*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION

\*Patients often presented with more than one somatic symptom.

## Limbitrol<sup>®</sup>

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

## Limbitrol DS<sup>®</sup>

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

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# JOURNAL

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  - urinary tract<sup>†</sup>
  - skin/skin structure<sup>†</sup>
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\**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

<sup>†</sup>Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO\* SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



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Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.



# Cipro<sup>®</sup> TABLETS (ciprofloxacin HCl/Miles)

## CONVENIENT B.I.D. DOSAGE

### Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg B.I.D.
Bone and Joint*	Severe/Complicated	750 mg B.I.D.
Skin/Skin Structure*	Mild/Moderate	250 mg B.I.D.
Urinary Tract*	Severe/Complicated	500 mg B.I.D.
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg B.I.D.

■ 500 mg B.I.D. for most infections;  
750 mg B.I.D. for severe or complicated infections.

### BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro<sup>®</sup> is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below.

**Lower Respiratory Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*.

**Skin and Skin Structure Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*.

**Bone and Joint Infections** caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*.

**Urinary Tract Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*.

**Infectious Diarrhea** caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei*\* when antibacterial therapy is indicated.

\*Efficacy for this organism in this organ system was studied in fewer than 10 infections.

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro<sup>®</sup> may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

#### CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

#### WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

#### PRECAUTIONS

##### General:

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

##### Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

##### Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness; therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

##### Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below.

- Salmonella/Microsome Test (Negative)
- E. coli* OXA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V<sub>79</sub> Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae Point Mutation Assay (Negative)
- Saccharomyces cerevisiae Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte OXA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results.

- Rat Hepatocyte OXA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

##### Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

##### Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

##### Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

#### ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, pooled in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typographical errors are italicized.

**GASTROINTESTINAL** (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

**CENTRAL NERVOUS SYSTEM** (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

**SKIN/HYPERSENSITIVITY** (See above), pruritus, urticaria, photosensitivity, flushing, fever, conjunctivitis, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

**SPECIAL SENSES** blurred vision, disturbed vision, (change in color perception, overbrightness of light, decreased visual acuity, diplopia, eye pain, tinnitus, bad taste).

**MUSCULOSKELETAL** joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout, renal/urinary interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

**CARDIOVASCULAR** palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

**RESPIRATORY** epistaxis, laryngeal or pulmonary edema, hiccough, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

**Adverse Laboratory Changes** Changes in laboratory parameters listed as adverse events without regard to relationship.

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LOH (0.3%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, and bleeding diathesis, increase in blood monocytes, and leukocytosis.

#### OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

#### DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours.

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

#### HOW SUPPLIED

Cipro<sup>®</sup> (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, or Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

\* Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

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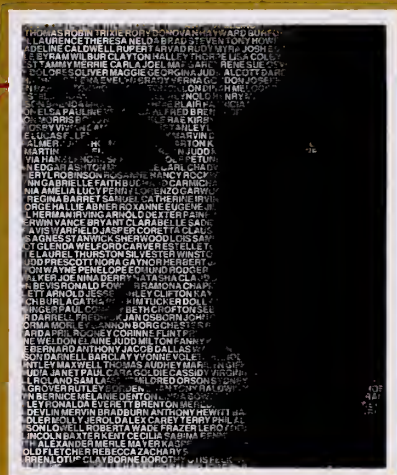


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# EXPECT YOUR NEXT PATIENT ON INDERAL® LA TO...

(PROPRANOLOL HCl)  
LONG ACTING CAPSULES 60, 80, 120, 160 mg





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# ON

...like the more than one million patients who have received **INDERAL® LA**.

In a recent survey, 4,120 participating physicians gave us their views<sup>1</sup> on **INDERAL LA** in the treatment of hypertension, angina and migraine.

## **INDERAL LA is their preferred beta blocker**

...of the nearly three out of four physicians responding to the questionnaire, an impressive 97% rated **INDERAL LA** good to excellent for overall performance. Virtually all cited efficacy, tolerability, long-term cardiovascular protection and once-daily convenience as important factors in their choosing to prescribe **INDERAL LA**.

## **INDERAL LA promotes patient compliance**

...Virtually every responding physician rated patient satisfaction with **INDERAL LA** to be as good as, or better than, other beta blockers.

Like conventional **INDERAL** Tablets, **INDERAL LA** should not be used in the presence of congestive heart failure, sinus bradycardia, cardiogenic shock, heart block greater than first degree and bronchial asthma.

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**INDERAL® LA**  
 (PROPRANOLOL HCl)  
 LONG ACTING CAPSULES  
 60, 80, 120, 160 mg

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Please see next page for brief summary of prescribing information.

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Feel like a  
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**INDERAL<sup>®</sup> LA**  
(PROPRANOLOL HCl)  
LONG ACTING CAPSULES  
60, 80, 120, 160 mg

The one you know best  
keeps looking better



60 mg 80 mg 120 mg 160 mg

BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION, SEE PACKAGE CIRCULAR.)

**INDERAL<sup>®</sup> LA** brand of propranolol hydrochloride (Long Acting Capsules)

**DESCRIPTION.** Inderal LA is formulated to provide a sustained release of propranolol hydrochloride. Inderal LA is available as 60 mg, 80 mg, 120 mg, and 160 mg capsules.

**CLINICAL PHARMACOLOGY.** Inderal is a nonselective, beta-adrenergic receptor-blocking agent possessing no other autonomic nervous system activity. It specifically competes with beta-adrenergic receptor-stimulating agents for available receptor sites. When access to beta-receptor sites is blocked by Inderal, the chronotropic, inotropic, and vasodilator responses to beta-adrenergic stimulation are decreased proportionately.

INDERAL LA Capsules (60, 80, 120, and 160 mg) release propranolol HCl at a controlled and predictable rate. Peak blood levels following dosing with Inderal LA occur at about 6 hours and the apparent plasma half-life is about 10 hours. When measured at steady state over a 24-hour period the areas under the propranolol plasma concentration-time curve (AUCs) for the capsules are approximately 60% to 65% of the AUCs for a comparable divided daily dose of Inderal Tablets. The lower AUCs for the capsules are due to greater hepatic metabolism of propranolol, resulting from the slower rate of absorption of propranolol. Over a twenty-four (24) hour period, blood levels are fairly constant for about twelve (12) hours then decline exponentially.

INDERAL LA should not be considered a simple mg-for-mg substitute for conventional propranolol and the blood levels achieved do not match (are lower than) those of two to four times daily dosing with the same dose. When changing to Inderal LA from conventional propranolol, a possible need for retitration upwards should be considered especially to maintain effectiveness at the end of the dosing interval. In most clinical settings, however, such as hypertension or angina where there is little correlation between plasma levels and clinical effect, Inderal LA has been therapeutically equivalent to the same mg dose of conventional Inderal as assessed by 24-hour effects on blood pressure and on 24-hour exercise responses of heart rate, systolic pressure, and rate pressure product. Inderal LA can provide effective beta blockade for a 24-hour period.

**INDICATIONS AND USAGE. Hypertension:** Inderal LA is indicated in the management of hypertension; it may be used alone or used in combination with other antihypertensive agents, particularly a thiazide diuretic. Inderal LA is not indicated in the management of hypertensive emergencies.

**Angina Pectoris Due to Coronary Atherosclerosis:** Inderal LA is indicated for the long-term management of patients with angina pectoris.

**Migraine:** Inderal LA is indicated for the prophylaxis of common migraine headache. The efficacy of propranolol in the treatment of a migraine attack that has started has not been established and propranolol is not indicated for such use.

**Hypertrophic Subaortic Stenosis:** Inderal LA is useful in the management of hypertrophic subaortic stenosis, especially for treatment of exertional or other stress-induced angina, palpitations, and syncope. Inderal LA also improves exercise performance. The effectiveness of propranolol hydrochloride in this disease appears to be due to a reduction of the elevated outflow pressure gradient which is exacerbated by beta-receptor stimulation. Clinical improvement may be temporary.

**CONTRAINDICATIONS.** Inderal is contraindicated in 1) cardiogenic shock; 2) sinus bradycardia and greater than first-degree block; 3) bronchial asthma; 4) congestive heart failure (see WARNINGS) unless the failure is secondary to a tachyarrhythmia treatable with Inderal.

**WARNINGS. CARDIAC FAILURE:** Sympathetic stimulation may be a vital component supporting circulatory function in patients with congestive heart failure, and its inhibition by beta blockade may precipitate more severe failure. Although beta blockers should be avoided in overt congestive heart failure, if necessary, they can be used with close follow-up in patients with a history of failure who are well compensated and are receiving digitalis and diuretics. Beta-adrenergic blocking agents do not abolish the inotropic action of digitalis on heart muscle.

**IN PATIENTS WITHOUT A HISTORY OF HEART FAILURE,** continued use of beta blockers can, in some cases, lead to cardiac failure. Therefore, at the first sign or symptom of heart failure, the patient should be digitalized and/or treated with diuretics, and the response observed closely, or Inderal should be discontinued (gradually, if possible).

**IN PATIENTS WITH ANGINA PECTORIS,** there have been reports of exacerbation of angina and, in some cases, myocardial infarction, following abrupt discontinuance of Inderal therapy. Therefore, when discontinuance of Inderal is planned, the dosage should be gradually reduced over at least a few weeks, and the patient should be cautioned against interruption or cessation of therapy without the physician's advice. If Inderal therapy is interrupted and exacerbation of angina occurs, it usually is advisable to reinstitute Inderal therapy and take other measures appropriate for the management of unstable angina pectoris. Since coronary artery disease may be unrecognized, it may be prudent to follow the above advice in patients considered at risk of having occult atherosclerotic heart disease who are given propranolol for other indications.

**Nonallergic Bronchospasm (eg, chronic bronchitis, emphysema) — PATIENTS WITH BRONCHOSPASTIC DISEASES SHOULD IN GENERAL NOT RECEIVE BETA BLOCKERS.** Inderal should be administered with caution since it may block bronchodilation produced by endogenous and exogenous catecholamine stimulation of beta receptors.

**MAJOR SURGERY:** The necessity or desirability of withdrawal of beta-blocking therapy prior to major surgery is controversial. It should be noted, however, that the impaired ability of the heart to respond to reflex adrenergic stimuli may augment the risks of general anesthesia and surgical procedures.

INDERAL (propranolol HCl), like other beta blockers, is a competitive inhibitor of beta-receptor agonists and its effects can be reversed by administration of such agents, eg, dobutamine or isoproterenol. However, such patients may be subject to protracted severe hypotension. Difficulty in starting and maintaining the heartbeat has also been reported with beta blockers.

**DIABETES AND HYPOGLYCEMIA:** Beta blockers should be used with caution in diabetic patients if a beta-blocking agent is required. Beta blockers may mask tachycardia occurring with hypoglycemia, but other manifestations such as dizziness and sweating may not be significantly affected. Following insulin-induced hypoglycemia, propranolol may cause a delay in the recovery of blood glucose to normal levels.

**THYROTOXICOSIS:** Beta blockade may mask certain clinical signs of hyperthyroidism. There is abrupt withdrawal of propranolol may be followed by an exacerbation of symptoms of hyperthyroidism, including thyroid storm. Propranolol may change thyroid function tests, increasing  $T_4$  and reverse  $T_3$  and decreasing  $T_2$ .

**IN PATIENTS WITH WOLFF-PARKINSON-WHITE SYNDROME,** several cases have been reported which, after propranolol, the tachycardia was replaced by a severe bradycardia requiring a demand pacemaker. In one case this resulted after an initial dose of 5 mg propranolol.

**PRECAUTIONS. GENERAL:** Propranolol should be used with caution in patients with impaired hepatic or renal function. Inderal (propranolol HCl) is not indicated for the treatment of hypertensive emergencies.

Beta-adrenoreceptor blockade can cause reduction of intraocular pressure. Patients should be cautioned that Inderal may interfere with the glaucoma screening test. Withdrawal may lead to a return in increased intraocular pressure.

**CLINICAL LABORATORY TESTS:** Elevated blood urea levels in patients with severe heart disease; elevated serum transaminase, alkaline phosphatase, lactate dehydrogenase.

**DRUG INTERACTIONS:** Patients receiving catecholamine-depleting drugs such as reserpine should be closely observed if Inderal (propranolol HCl) is administered. The additive catecholamine-blocking action may produce an excessive reduction of resting sympathetic nervous activity which may result in hypotension, marked bradycardia, vertigo, syncope, ataxic or orthostatic hypotension.

Caution should be exercised when patients receiving a beta blocker are administered a calcium channel-blocking drug, especially intravenous verapamil, for both agents may depress myocardial contractility or atrioventricular conduction. On rare occasions, the concomitant intravenous use of a beta blocker and verapamil has resulted in serious adverse reactions, especially in patients with severe cardiomyopathy, congestive heart failure, or recent myocardial infarction.

Aluminum hydroxide gel greatly reduces intestinal absorption of propranolol.

Ethanol slows the rate of absorption of propranolol.

Phenytoin, phenobarbital, and rifampin accelerate propranolol clearance.

Chlorpromazine, when used concomitantly with propranolol, results in increased plasma levels both drugs.

Antipyrene and lidocaine have reduced clearance when used concomitantly with propranolol.

Thyroxine may result in a lower than expected  $T_3$  concentration when used concomitantly with propranolol.

Cimetidine decreases the hepatic metabolism of propranolol, delaying elimination and increasing blood levels.

Theophylline clearance is reduced when used concomitantly with propranolol.

**CARCINOGENESIS, MUTAGENESIS, IMPAIRMENT OF FERTILITY:** Long-term studies in animals have been conducted to evaluate toxic effects and carcinogenic potential. In 18-month studies in both rats and mice, employing doses up to 150 mg/kg day, there was no evidence of significant drug-induced toxicity. There were no drug-related tumorigenic effects at any of the dosage levels. Reproductive studies in animals did not show any impairment of fertility that was attributable to the drug.

**PREGNANCY:** Pregnancy Category C. Inderal has been shown to be embryotoxic in animals; studies at doses about 10 times greater than the maximum recommended human dose.

There are no adequate and well-controlled studies in pregnant women. Inderal should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**NURSING MOTHERS:** Inderal is excreted in human milk. Caution should be exercised when Inderal is administered to a nursing woman.

**PEDIATRIC USE:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS.** Most adverse effects have been mild and transient and have rarely required the withdrawal of therapy.

**Cardiovascular:** Bradycardia; congestive heart failure; intensification of AV block; hypotension; paresthesia of hands; thrombocytopenic purpura; arterial insufficiency, usually of the Raynaud type.

**Central Nervous System:** Light-headedness; mental depression manifested by insomnia, lassitude, weakness, fatigue; reversible mental depression progressing to cataplexy; visual disturbances; hallucinations; vivid dreams; an acute reversible syndrome characterized by disorientation for time and place, short-term memory loss, emotional lability, slightly clouded sensorium, and decreased performance on neuropsychometrics. For immediate formulations, fatigue, lethargy, and vivid dreams appear dose related.

**Gastrointestinal:** Nausea, vomiting, epigastric distress, abdominal cramping, diarrhea, constipation, mesenteric arterial thrombosis, ischemic colitis.

**Allergic:** Pharyngitis and agranulocytosis, erythematous rash, fever combined with aching and sore throat, laryngospasm and respiratory distress.

**Respiratory:** Bronchospasm.

**Hematologic:** Agranulocytosis, nonthrombocytopenic purpura, thrombocytopenic purpura.

**Auto-immune:** In extremely rare instances, systemic lupus erythematosus has been reported.

**Miscellaneous:** Alopecia, LE-like reactions, psoriasisiform rashes, dry eyes, male impotence, and Peyronie's disease have been reported rarely. Oculomucocutaneous reactions involving the skin sensory membranes and conjunctivae reported for a beta blocker (practolol) have not been associated with propranolol.

**DOSAGE AND ADMINISTRATION.** Inderal LA provides propranolol hydrochloride in a sustained-release capsule for administration once daily. If patients are switched from Inderal Tablets to Inderal LA Capsules, care should be taken to assure that the desired therapeutic effect is maintained. Inderal LA should not be considered a simple mg-for-mg substitute for Inderal. Inderal LA has different kinetics and produces lower blood levels. Retitration may be necessary, especially to maintain effectiveness at the end of the 24-hour dosing interval.

**HYPERTENSION — Dosage must be individualized.** The usual initial dosage is 80 mg Inderal LA once daily, whether used alone or added to a diuretic. The dosage may be increased to 120 mg once daily or higher until adequate blood pressure control is achieved. The usual maintenance dosage is 120 to 160 mg once daily. In some instances a dosage of 640 mg may be required. The time needed for full hypertensive response to a given dosage is variable and may range from a few days to several weeks.

**ANGINA PECTORIS — Dosage must be individualized.** Starting with 80 mg Inderal LA once daily, dosage should be gradually increased at three- to seven-day intervals until optimal response is obtained. Although individual patients may respond at any dosage level, the average optimal dosage appears to be 160 mg once daily. In angina pectoris, the value and safety of dosage exceeding 320 mg per day have not been established.

If treatment is to be discontinued, reduce dosage gradually over a period of a few weeks (see WARNINGS).

**MIGRAINE — Dosage must be individualized.** The initial oral dose is 80 mg Inderal LA once daily. The usual effective dose range is 160-240 mg once daily. The dosage may be increased gradually to achieve optimal migraine prophylaxis. If a satisfactory response is not obtained within four to six weeks after reaching the maximal dose, Inderal LA therapy should be discontinued. It may be advisable to withdraw the drug gradually over a period of several weeks.

**HYPERTROPHIC SUBAORTIC STENOSIS — 80-160 mg Inderal LA once daily.**

**PEDIATRIC DOSAGE —** At this time the data on the use of the drug in this age group are too limited to permit adequate directions for use.

\*The appearance of these capsules is a registered trademark of Ayerst Laboratories.

**Reference:**

1. Data on file, Ayerst Laboratories.

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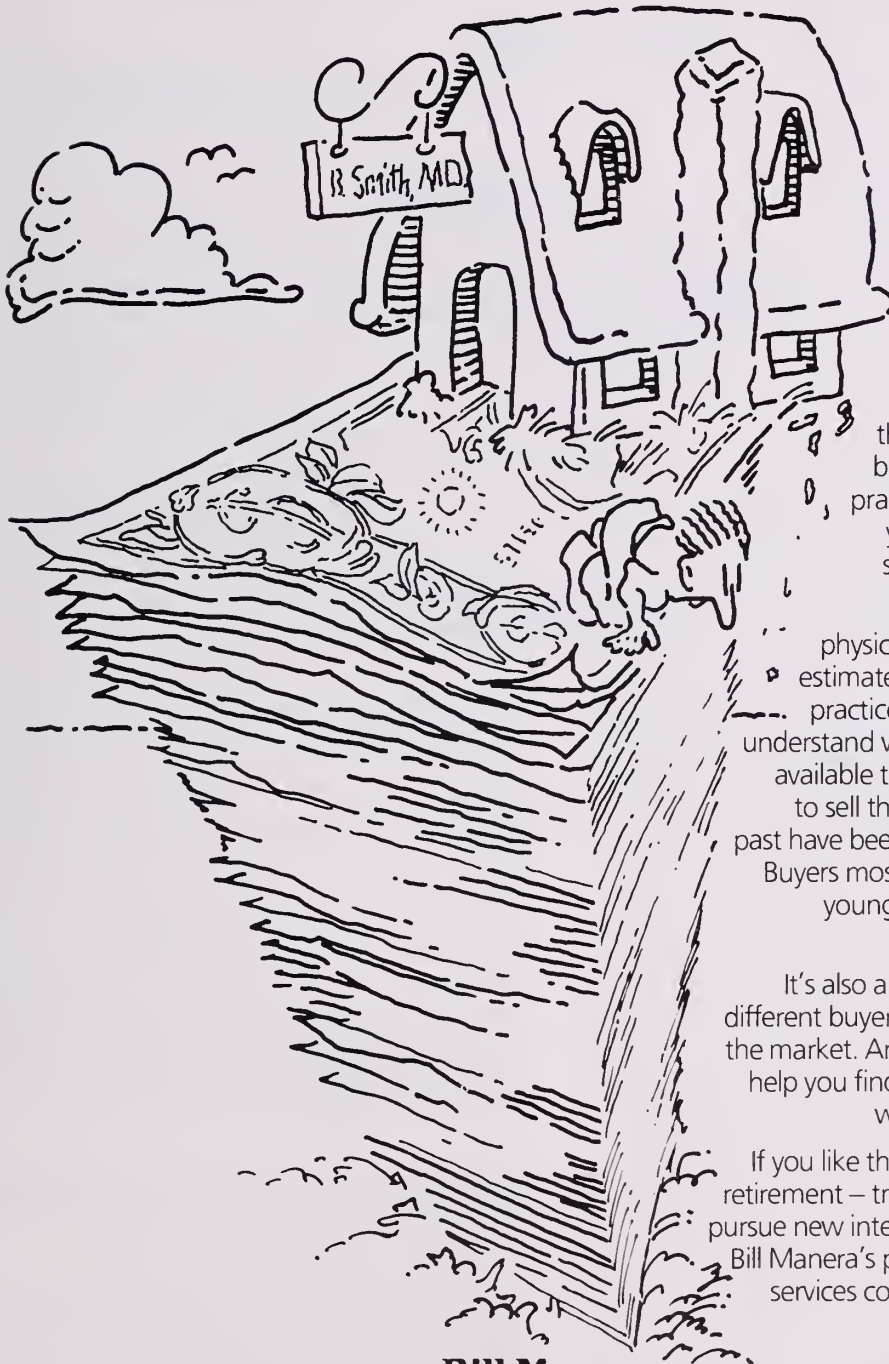
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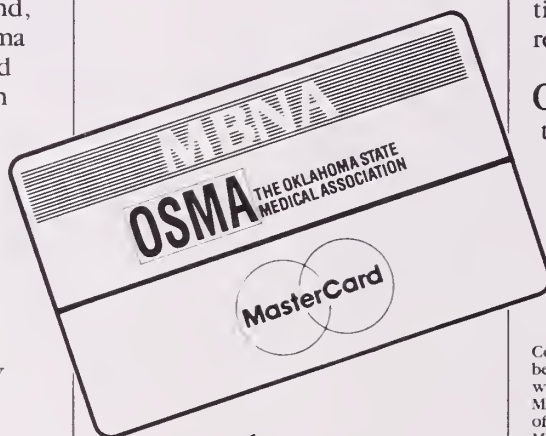
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ADDRESS \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_  
HOME PHONE ( ) \_\_\_\_\_ BUS. PHONE ( ) \_\_\_\_\_  
ARE YOU: ☐ Renting ☐ Own ☐ Buying Monthly Payment \$ \_\_\_\_\_  
SOCIAL SECURITY# \_\_\_\_\_  
DATE OF BIRTH \_\_\_\_\_  
EMPLOYER/NAME OF BUSINESS \_\_\_\_\_  
POSITION \_\_\_\_\_ YEARS THERE \_\_\_\_\_  
ANNUAL SALARY \$ \_\_\_\_\_ OTHER INCOME\* \$ \_\_\_\_\_ SOURCE \_\_\_\_\_  
\* (Alimony, child support, or separate maintenance income need not be revealed if you do not wish it considered as a basis of repayment.)  
MOTHER'S MAIDEN NAME \_\_\_\_\_  
(For use when you request special action taken on your account)

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My MasterCard® /VISA® Account # is \_\_\_\_\_  
My American Express® Account # is \_\_\_\_\_  
Previous address (Please complete if at current address less than 3 yrs.) \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_ ZIP \_\_\_\_\_

BDPA PREVIOUS EMPLOYER (If less than 3 yrs.) \_\_\_\_\_ YEARS THERE \_\_\_\_\_  
I have read this entire application, agree to its terms, and certify the information is correct.

10-173 APPLICANT SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_ (Seal)  
04-382 If you wish an additional card issued to a co-applicant over 18 years of age complete the information below.

CO-APPLICANT NAME \_\_\_\_\_  
RELATIONSHIP \_\_\_\_\_ SOCIAL SECURITY# \_\_\_\_\_  
EMPLOYER \_\_\_\_\_ YEARS THERE \_\_\_\_\_  
POSITION \_\_\_\_\_ ANNUAL SALARY \$ \_\_\_\_\_  
OTHER INCOMES \_\_\_\_\_ WORK PHONE ( ) \_\_\_\_\_  
\* (Alimony, child support, or separate maintenance income need not be revealed if you do not wish it considered as a basis of repayment.)

I have read this entire application and agree to its terms, and understand that I will be jointly and severally liable for all charges on the account.

CO-APPLICANT SIGNATURE \_\_\_\_\_ Date \_\_\_\_\_ (Seal)  
I (we) authorize MBNA® to investigate any facts, or obtain and exchange reports regarding this application or resulting account with credit reporting agencies and others. Upon request I (we) will be informed of each agency's name and address.

†The ANNUAL PERCENTAGE RATE is 15.9%. The ANNUAL FEE for the Gold MasterCard is \$30. The ANNUAL FEE for the Silver MasterCard is \$20. GRACE PERIOD: You will not be assessed a FINANCE CHARGE on purchases if you pay the New Balance Total each month by the Payment Due Date (25 days after the closing date). If this amount is not paid, FINANCE CHARGES accrue from the date of transaction. Cash Advances bear FINANCE CHARGES from the date of transaction. OTHER CHARGES: You will be charged an overlimit fee of \$15 if your New Balance Total on your billing date is more than 15% over your credit limit. You will be charged a late fee of \$15 if you fail to make required payment within 15 days after the Payment Due Date. You will be charged a return check fee of \$15 if a check submitted as payment is returned for any reason.

(OSMAI)

### What's Happening — with CPR?

Every time I read a story that describes the heroic salvation from death of someone whose “heart had stopped” by someone who provided cardiopulmonary resuscitation (CPR), I feel really kind of inadequate. Oh, I’ve been trained and certified and refreshed in CPR techniques. And I am even moderately well informed about the manifestations of death. What bothers me — and makes me feel inadequate — is the apparent skill the handy rescuers possess in determining that someone’s heart has stopped.

Imagine. A person, presumably fully clothed, collapses. Another person, that soon-to-be rescuer, is in the immediate vicinity and, without the aid of a stethoscope, almost instantly determines that the “victim’s heart was not beating.”

Remarkable. I am so inept, even after my medical school education, my years of postgraduate study, and 40 years of practicing medicine, it occasionally takes me a minute or so — checking for carotid, radial, and femoral pulses while holding a stethoscope against a bare precordium — to determine that a human heart has indeed stopped beating.

I realize, of course, that the success of CPR efforts lies in their prompt and skillful application, and that it is imprudent to delay them unnecessarily. However, the time required to conduct a pharyngeal sweep, to ascertain the presence and effectiveness of respirations and the state of consciousness is critically germane to the propriety of CPR efforts and therefore indispensable.

Few physicians would argue that CPR efforts are appropriate for the victims of simple syncope, heat exhaustion, major and minor seizure disorders, or alimentary hypoglycemia. And what physician would administer CPR to a victim of cardiac arrest who has, to that physician’s knowledge, executed

legal documents prohibiting its employment?

I have to wonder how many CPR “successes” have been “victims” of benign rather than fatal events; how many were deprived of their right to die of natural causes; how many ribs have been broken, hearts have been ruptured, aortas and lungs have been punctured as the result of inappropriate CPR efforts. Worse yet, how many vegetating bodies have been transformed from human beings through the application of CPR efforts, irrespective of the presence of indications or the competency or judgment of those involved in carrying out the efforts?

If we don’t know the answers to these questions — and I’ve never seen them in any available document or publication — shouldn’t we find them? If CPR efforts are doing more harm than good, we need to know it and take the steps necessary to minimize the harm and increase the benefits of those efforts.

Undeniably, economic factors are involved in assessing the harm/benefit effects of CPR; they are important, possibly reaching shocking magnitudes. But economic issues are secondary to the primary, unanswered questions posed by the current practices in applying CPR efforts.

Responsible, well-intentioned physicians developed, perfected, and sponsored the earliest CPR protocols and techniques. It is unfortunate that we have ignored our obligations to monitor their effectiveness.

A long overdue retrospective outcome study of all CPR results might reveal an urgent need for a new warning label:

*Good judgment must be vigorously exercised before applying this treatment. It is not an innocuous agent and may have serious side effects.*

— MRJ



## PRESIDENT'S PAGE

The American Medical Association meets twice a year, annually in Chicago and six months later in some other major city of its constituency. These meetings are a "town hall" forum for the exposition of any and all problems seen by medical societies and physicians across the entire United States.



The problems presented at these meetings range from the most mundane to the most profound questions of life and liberty. About forty board and council reports and nearly two hundred resolutions are discussed and processed at each of these meetings. Some proposals are adopted, some are rejected, many are rewritten and refined, and a few are held for further study and later action.

Significantly, a stellar array of medical experience and genius processes these diverse data to produce recommendations and policies that approach a consensus of the best minds of the nation. The resulting "AMA Policy" has come to be respected by nearly everyone except perhaps the politicians — who usually blunder when they ignore it. Most health policy decisions in the nation receive illumination by AMA policy statements.

The American Medical Association is broadly representative of the nation's physicians. With several specialty sections, and delegates from each state (and Puerto Rico, Guam, and the Virgin Islands), the viewpoint of every physician-member can be presented to the final pathway of policy decision. Democratic processes permit the consideration of all pertinent viewpoints, and any physician's good idea has the possibility of becoming "AMA Policy."

The Association has a variable record of success in achieving policy objectives. An excellent record is present in medical science, and the advancement of medicine is constantly pressed. The current pre-

eminence of American medicine in the world is due at least in part to consistent AMA encouragement of excellence in medicine and science.

The legislative and judicial processes of the nation have been less regularly influenced by the Association's advice, and some criticism of the AMA results from this fact. Yet it must also be said that the failure of effect more often derives from the recalcitrance of other professions than from improper advice. At least, it can be said that the AMA is now receiving increased credence by the legal professionals. Even Congress, struggling with its many past errors in Medicare and Medicaid, has begun to turn an ear to the advice of the Association.

Some say the American Medical Association is outmoded in today's specialty world, and it is true that the specialty societies do need their specialized dialogue. But it is also true that a universal cohesiveness is absolutely necessary in any approach to the legislative or judicial forum, and there the umbrella agenda of the AMA far outperforms the splintered sayings of the specialty societies.

Our own Oklahoma delegation to the American Medical Association enjoys a national reputation for effectiveness that is far out of proportion to its numbers. By consistent attendance of both delegates and alternate delegates at the council and committee activities where the pot is boiling, the Oklahoma presence is effectively established. Our delegates work on important councils and committees and assert the values of Oklahoma medicine.

Many features of present AMA policy owe their origin to our Oklahoma delegation and their persistent advocacy.

We Oklahoma physicians can be justly proud of our Oklahoma delegation to the American Medical Association. We can personally thank them for what they do, and we should ask them to continue to put "Oklahoma smarts" into AMA health policy.

*Ray V. McIntyre, M.D.*



# Clinical Psychology and Cost Effective Rehabilitation: A Behavioral Medicine Approach

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*Clinical psychology, once confined to a narrow and restricted role in medical rehabilitation, now offers a variety of cost-effective solutions to a broad range of problems.*

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## DELIVERY OF PSYCHOLOGICAL SERVICES

It has only been in the last ten to twenty years that clinical psychologists have been utilized to any great extent in *physical* health care as opposed to *mental* health care settings. Initially, university acute care hospital settings employed clinical psychologists primarily via academic health sciences center appointments, with their efforts being largely geared toward research aims and traditional psychological assessment and psychotherapy. In more recent years, private acute care hospitals have joined this movement by hiring psychologists to engage in a variety of psychotherapeutic enterprises and in consultation-liaison to other clinical services. These trends stand in contrast to a relatively long history of the involvement of psychologists exclusively in traditional mental health care settings and the use

of psychological principles in ameliorating emotional and behavioral difficulties.

The history of *rehabilitation psychology*, that is, psychologists involved in physical medicine and rehabilitation pursuits, largely parallels the growth trends witnessed in acute care settings. Larger numbers of psychologists are now being hired to work in rehabilitation settings. The scope of involvement for rehabilitation psychologists has been limited, however, to a few specific themes and set of issues. This scope has primarily involved the themes of facilitating adjustment to disability, coping with negative emotional states, and aiding in the development of postdischarge vocational rehabilitation plans. In some instances, psychologists have also been involved in neuropsychological assessment; yet, for the most part, the role of clinical psychology has been confined to a narrow set of issues.

In recent years a new focus has emerged, that of *behavioral medicine*, *health psychology*, or *medical psychology*.<sup>1,2</sup> Behavioral medicine as an interdisciplinary subspecialty is based on the premise that psychological principles, particularly those that are empirically based, can be applied to complex biopsychosocial problems, and in this regard can facilitate prevention and treatment of disease states. Clinical psychologists and behavioral scientists in a

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wide variety of settings have begun to utilize these strategies to treat problems of noncompliance, chronic pain, hypertension, smoking, and obesity, to name but a few. In large part, such approaches have involved the use of behavioral and cognitive-behavioral protocols, direct educational approaches, and short-term directive psychotherapeutic techniques to ameliorate specific target problems. The current article is based on the premise that a behavioral medicine approach to rehabilitation medicine can provide a cost-effective and efficacious model for the delivery of psychological services, and that such a model should supplant more traditional approaches.

## PARALLEL GROWTH

As the field of behavioral medicine has expanded, so also has emerged the separate parallel growth of rehabilitation facilities in this country. These facilities have taken the form of free-standing inpatient and outpatient rehabilitation facilities, inpatient units placed in acute care hospital settings, as well as what is now referred to as a CORF (Comprehensive Outpatient Rehabilitation Facility). The tremendous growth of the rehabilitation industry has been a joint function of:

(1) The "Graying of America," ie, a substantial portion of our population being at the age of 65 years or beyond;

(2) Life-saving medical procedures, which have resulted in greater numbers of individuals surviving both traumatic injuries and significant disease states;

(3) Diagnostic-related groups (DRGs) and the expanding health care network, including the trend toward regional expansion of for-profit corporate hospital entities.

Consequently, substantial demands have been placed on caregivers to provide a wide variety of services specific to the rehabilitation process, and to deliver high quality care with shorter hospital stays for higher levels of independence with maximum financial profit.

Rehabilitation efforts have been extended to a number of traditional and nontraditional populations of patients, including spinal cord injuries, traumatic brain injuries, metabolic neurological disease states, cardiovascular disease states, amputations, and hip and knee replacements, as well as other chronic illnesses and congenital birth defects which are disabling. As a result, large numbers of individuals falling under the rubric of

"rehabilitation candidates" are receiving rehabilitation care.

Together, the demands for higher levels of technical rehabilitation care and the ever increasing numbers of patients have led to a critical demand for innovative and cost-effective ways to facilitate the rehabilitation process.

## A BEHAVIORAL APPROACH

Rehabilitation has long been characterized as an interdisciplinary approach involving various therapeutic regimens. The usual stated goal of rehabilitation is to enhance independent functioning in all spheres of physical, cognitive, and emotional functioning, and in this regard to decrease dependency on other individuals in a health care system. *It would appear to be a fundamental fact that people who are independent or in most regards independent do not overutilize the social system network or the health care network to the same extent as the nonindependent or nonrehabilitated individual.*

Given that rehabilitation is largely a process of learning, and therefore is a behavioral process in the broad sense, clinical psychologists have the potential

***Psychological and behavioral variables play a significant role in the development of chronic disease states.***

to play a critical and expanded role in the entire rehabilitation delivery system. In particular, however, clinical psychologists can contribute based on the following tenets, facts, and assumptions:

(1) Psychological and behavioral variables play a significant role in the development of chronic disease states, eg, smoking, overeating, engaging in high risk behaviors<sup>3</sup>;

(2) Compliance must occur in all realms, and as a behavioral phenomenon is critical if rehabilitation is to take place;

(3) Adjustment to disability is a necessity if people are to access their personal resources regained through rehabilitation, and it must occur as quickly as possible;

(4) Previous psychological efforts to affect the acute health care system have resulted in greater



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cost effectiveness, in terms of decreased overutilization of the health care system.<sup>4-7</sup>

Such tenets support a new, dramatically expanded role of clinical psychology in the arena of rehabilitation. The skills inherent in a behavioral medicine approach lend themselves rather easily to the achieving of primary goals in rehabilitation. For the purposes of this paper, such skills can be defined in the context of *roles*.

## ROLE OF CLINICAL PSYCHOLOGY

From a behavioral medicine perspective, the clinical psychologist has various new roles as a member of the rehabilitation treatment team, in contrast to traditional narrow models.

As a *diagnostician*, the psychologist assesses levels of emotional, cognitive, and neuropsychological functioning. A wide variety of patterns of behavior and abilities are thus identified. In this way, an integrated profile of the patient is available for the purpose of both diagnosis and team treatment planning. This conceptualization of the "whole person" is a vast improvement over traditional rehabilitation assessment approaches, which led to a piecemeal and partial understanding of patients' functions.

As a *therapist*, the psychologist provides treatment which ranges from the provision of traditional psychotherapy for adjustment to disability, to behavior modification, to innovative biofeedback techniques for amelioration of pain and of neuromuscular deficits.<sup>8,9</sup>

As a *teacher*, the psychologist is involved in both staff consultation and education as well as patient and family education on management of health disabilities and their prevention.<sup>10</sup> The psychologist's responsibility is to impart information that can facilitate the entire staff's therapeutic efforts, as well as helping patients to become their own personal change agent.

Types of psychological services offered depend not only on the needs of the particular population of patients and resources of the treatment facility, but also on the philosophy of the rehabilitation treatment providers. As mentioned earlier, the philosophy behind rehabilitation is one of facilitation of the highest possible level of functioning and of long-term adjustment for the patient. This goal is best achieved through an interdisciplinary team approach. Its attainment *must be measured in terms of objective behavioral recovery*. In keeping with this philosophy, the clinical psychologist practices within the

framework of a behavioral medicine approach. That is, behavior is operationally defined and deficits are identified; pragmatic, short-term techniques are applied to facilitate their resolution. Long-term adjustment is also dependent on maintenance of treatment results and prevention of future dysfunction.<sup>11</sup> Therefore, patient and family education on management and prevention is an integral part of behavioral medicine rehabilitation.

## SPECIFIC THERAPEUTIC ROLES

As emphasized earlier, the clinical psychologist also has a primary responsibility to actively consult with the treatment team. Feedback to therapists of all disciplines is essential to integrated treatment planning and monitoring. For example, knowledge of the patient's cognitive and neuropsychological abilities enables therapists to determine the most appropriate type and level of intervention in the context of their discipline. Knowledge of personality variables is also essential, given that these variables can often significantly interfere with the patient's participation in treatment. However, when identified and directed toward recovery, these variables can be the patient's greatest assets.

Management with regard to personality variables becomes a particular problem with brain-injured patients. Such patients frequently develop agitation, aggressive and combative behavior, sexual acting-out, oppositional behavior, or extreme lethargy. In such cases, clinical psychologists take on the critical task of behavior management programming.<sup>12</sup>

When a behavior management program is used, it is typically carried out hospital-wide not only by therapists, but by nursing staff as well. The psychologist monitors progress, adapts the program, and directs the staff accordingly. Therefore, education of the treatment team in behavioral principles is essential and, in this way, behavioral principles are part of a coordinated, structured treatment program.

Psychotherapeutic activities of the psychologist include not only individual, but also group and family therapy. Specific areas of the patient's functioning that are addressed include adjustment to disability, cognitive retraining, motor and neuromuscular retraining, relaxation training, and pain management. This list can undoubtedly be elaborated on according to particular patient populations and available resources.

Adjustment to disability is treated individually through traditional psychotherapy as well as through behavioral management. Group therapy is



useful in developing a support network within the patient population, in educating the patient, and in increasing self-awareness. A variety of specialty groups are also offered according to common needs, eg, social skills, sexual dysfunction, job interview skills, etc.

No less important is intervention through family therapy. This type of treatment is helpful in dealing with changes in the family system, particularly role reversals in which, for example, children have to take on parenting of the patient, or wives have to take on a role more typically filled by the husband. Family adjustment is critical because the patient's support system will have a significant impact on recovery and maintenance.<sup>8</sup> Group therapy for families also promotes good family adjustment through the development of peer support, and increases the likelihood of participation in community support groups following the patient's discharge.

Cognitive retraining for brain-injury patients is carried out to teach patients new ways of processing information to facilitate compensation for loss of certain abilities.<sup>13-15</sup> Retraining techniques are helpful for attention and memory disorders, impairments in visual-spatial perception, apraxias and agnosias, and impairments in conceptual reasoning and judgment. Cognitive retraining relies on operant conditioning principles. Strategies may include emphasis on compensatory skills based on remaining strengths, or relearning specific contents as appropriate. Training may be carried out one-on-one, in groups, or with microcomputers. In all cases, the emphasis is on problem-solving strategies.

As is apparent, many roles and tasks are involved when a behavioral medicine approach is utilized. Without acceptance of this role, however, little can be accomplished.

## OBSTACLES TO ACCEPTANCE

Historically, psychological services have been called upon for a notably narrow range of services; this request occurs usually when all else fails, placing such services outside of the rehabilitation arena and in the role of a consulting capacity. Thus, when the psychologist was "called in," the patient follows the bias of his or her treatment team and more than occasionally assumes, "They think I'm crazy!" A further impediment to the use of psychological services has been the traditional medical model. With the medical model, physicians have been viewed as the more scientific practitioners of healing, with the additional and subordinate roles of caring

for and nurturing falling to the nursing and social work staff. In this model, clinical psychology was given little or no role, and vital services were overlooked.

Unfortunately, some physicians have unwittingly acquired the mindset that psychologists treat only the mentally ill or persons with severe personal problems. Other myths prevail wherein psychologists' work is somewhere between voodoo and a questionably soft science. Also, it is commonly

***Present-day behavioral medicine approaches can offer pragmatic results which enhance all rehabilitation efforts.***

thought that psychological treatment is necessarily a long-term process with doubtful results.

The role of clinical psychology as an integral component of rehabilitation medicine has been increasingly acknowledged and utilized by administrators, physicians, and other staff professionals in state-of-the-art rehabilitation settings. This acknowledgment has been slow in coming, however. The responsibility falls upon psychologists in rehabilitation to persuade physicians that present-day behavioral medicine approaches can offer pragmatic results which enhance all rehabilitation efforts, their own included. One can easily observe that psychological assessment can more accurately discern the manner and degree of dysfunction of the rehabilitation patient; that work by psychologists with individuals and groups of rehabilitation patients is effective in ameliorating emotional and psychosocial barriers to a patient's progress; and that psychologists can have great value in facilitating more productive relationships with other therapy personnel and the rehabilitation population. All in all, the efforts of the psychology staff can remove many of the perhaps unwanted responsibilities and frustrations that physicians face, and thus allow them more freedom to focus upon the practice of medicine.

Another major obstacle to acceptance of psychological services is that of the patients themselves and their families. Many patients cannot perceive their own emotional needs when they are first admitted to a rehabilitation facility, primarily because of their state of crisis and their cognitive


status. For them and their families, psychological services often are foreign to their experience and personally threatening. Patients and their families must be convinced that the process of adjusting to disability goes through steps similar to those in the "normal" grief process. Quality counseling from clinical psychology can then assure a more complete and prompt working through the stages of adjustment. Achieving an optimum adjustment to disability allows other therapies to proceed with less delay and obstruction, and in so doing, produces results with greater cost effectiveness.

Various avenues are possible in overcoming nonreceptivity to psychological services. With physicians and administrators, the basic underlying principle is to present psychology as a serious, pragmatic profession whose skills can potentially resolve many difficult situations with the patient and his or her family. The psychologist's expertise can demonstrate how to facilitate recovery, hasten recovery, and lower frustration and discomfort for patients, rehabilitation staff, and patients' families. Through educational avenues, such as inservices, workshops, and grand rounds, staff can be taught basic behavior modification strategies, interpersonal communication skills, family interaction strategies, and models of neuropsychological function. In this way staff members become more psychologically sophisticated, which ultimately leads to greater staff consistency and better outcomes. In addition, the clinical psychologist must show that psychological services are revenue-producing for the institution. In our experience, psychology staff can easily cover the costs of their salaries and then provide profit-revenue simply by charging for their services.

Finally, to patients and patients' families, one must explain roles and functions, using psychological discretion. The psychologist must not seem intrusive and must explain how services can be practical and ultimately result in greater progress and higher self-worth. Ordinarily, the majority of families accept this role, especially if it is portrayed as being as integral to treatment as physical therapy or occupational therapy.

## SUMMARY

Although clinical psychologists have a relatively long history of involvement in rehabilitation settings, their role has typically been narrow in focus until recent years. With the advent of behavioral medicine approaches to prevent and treat health-related problems, a new conceptual framework

emerges under which clinical psychologists can assume an expanded role in physical rehabilitation settings. Such a role can result in a more scientific and pragmatic approach to physical medicine problems, with the end result being better outcomes in patient care. Potentially, these outcomes can be measured in terms of greater compliance with therapeutic regimens, quicker adjustment to disability, fewer behavior problems in the hospital with better long-term maintenance of progress toward goals. Thus, a behavioral medicine approach to physical medicine rehabilitation can greatly enhance the efforts of the physician and the rest of the therapy team. 

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# Renal Cell Carcinoma: A Rural Experience

K.T. Varma, MD

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*The occurrence of renal cell carcinoma in a rural setting is compared and contrasted with selected series of cases from larger urban centers. The study suggests this rare tumor is probably more rare in a rural surrounding and is likely to occur a decade of life later than it occurs in urban areas. The study also suggests that both sexes are equally prone to the malignancy.*

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**W**hile renal cell carcinoma is a rare malignancy, 36 cases were diagnosed in Grady Memorial Hospital, Chickasha, Oklahoma, between July 1972 and July 1987. This is an average of 2.4 cases per year in an average 130 malignancies diagnosed here.

Investigation for hematuria, renal colic or pain, symptoms relative to metastatic disease, and incidental findings resulted in the diagnosis. The youngest patient was 42 years old and the oldest 87. The peak incidence was in the seventh decade of life. The mean age was 66.06 years. There were 20 males and 16 females.

Thirty patients were operated on in Grady Memorial Hospital by the same urologist, with the first assistant being a general or vascular surgeon. The follow-up rate has been 100%. Three patients received no treatment because of advanced disease, or age, or both. Two patients were referred to University Medical Center in Oklahoma City because of metastatic disease in the brain or lung at the time of diagnosis. One patient preferred to be

operated on in a bigger medical facility in Oklahoma City (Tables 1 and 2).

The surgical approach was transperitoneal radical technique utilizing either mid-line or subcostal incision. Early isolation of renal vessels and ligation of the renal artery were strictly adhered to.

The peritoneum, entire Gerota's fascia with the kidney, and perinephric fat were removed. Occasionally, if a tumor involved only the lower pole, especially on the right side, the adrenal gland was left in place. In cases of large tumors on the left side, there was increased incidence of splenectomy.

Node dissection was selective. If nodes were grossly enlarged and fixed, no attempt was made to remove them. If there were no enlarged nodes and a small tumor was grossly confined to the kidney, then also no attempt was made to remove the nodes. If there were discrete enlarged nodes, a regional node dissection was undertaken.

There has been no surgical mortality. Morbidity has been very minimal.

## SELECTIVE REVIEW OF LITERATURE

Adult renal cell carcinoma is rare and is estimated to constitute less than 3% percent of all adult malignancies.<sup>1</sup> The national incidence has been estimated between 12,000 and 18,000 per year, and it is suggested that the incidence is on the rise.<sup>1,2</sup>

Several large studies indicate a clear preponderance of males suffering from this malignancy, by a 2:1 ratio.<sup>3,4</sup> It has also been implied that renal cell

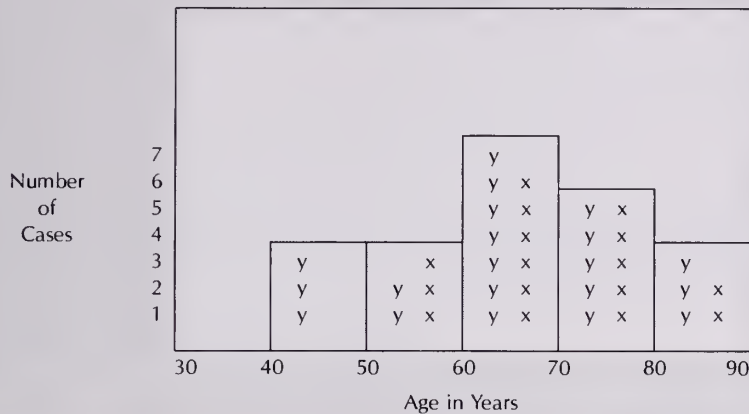
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**Table 1. Age and Sex Distribution**

Age and Sex Distribution: 20 males, 16 females  
Mean age — 66.06 years



carcinoma has predilection for the urban dweller.<sup>1,5</sup> There is no known specific etiology for this malignancy. Epidemiological studies have been non-conclusive.

Investigation for hematuria, renal colic, and symptoms resulting from already metastasized disease, as well as incidental findings have been responsible for the diagnosis of the condition.

Paraneoplastic syndromes consisting of erythrocytosis, hypercalcemia, hepatic dysfunction, and hyperreninism have been present occasionally.

Intravenous pyelography (IVP), ultrasonography, CAT scan, and renal arteriography are sufficient to make the diagnosis with 95% accuracy.

Untreated renal cell carcinoma has a dismal prognosis. During the last three decades, radical nephrectomy has been the mainstay of treatment for renal cell carcinoma. Significant improvement in survival with localized disease has subsequently resulted. In metastasized disease, the prognosis remains bleak. No promising adjunct therapy is available.

Pre-operative staging is less than optimal. Hence intra-operative staging has to be employed. The staging system used in the United States is that of Flocks and Kadesky, modified by Robson and Associates (Table 3).

A true radical nephrectomy consists of the removal of peritoneum covering the kidney, Gerota's fascia, and contents with early ligation of the renal artery and vein and dissection of regional lymph nodes. Regional lymphadenectomy facilitates the staging process. There is also some indication that it improves survival.<sup>6</sup>

Five-year survival for cases of localized disease that is in Stage I and II has been more than 60% in several large studies.<sup>3,4</sup> In Robson's study, the 10-year survival also has been 60%. The survival rate in Stage III disease for five years has been only 40%. Stage IV tumors do poorly, and less than 10% of patients survive up to five years.

## DISCUSSION

Most series reported in the literature are from large urban medical centers and, understandably, are

**Table 2. Presenting Complaints**

Presenting Complaints	Number
1. Hematuria — gross or microscopic	13
2. Incidental IVP finding	8
3. Signs and symptoms of metastatic disease	7
4. Associated second primary	5
5. Renal colic or renal pain	5
6. Renal mass discovered during unrelated surgery	4
7. Acute varicocele	1

**Table 3. Staging System for Renal Cell Carcinoma**

Staging system of Flocks and Kadesky, modified by Robson and Associates	
Stage I	— Tumor is confined to kidney
Stage II	— Tumor involves the perinephric fat but confined to Gerota's fascia
Stage III	— Tumor involves renal vein or regional lymph nodes — with or without involvement of vena cava or perinephric fat
Stage IV	— Distant metastases already present at time of diagnosis

Table 4. Summary of Cases

Stage	Number of cases	5-year Survival*	10-year Survival	Comments
I	16	9/11 (81.82%)	2/6 (33.33%)	One Stage I patient died of a solitary brain metastasis, 4 yrs after surgery. Three Stage I patients died of unrelated causes between 5 and 10 years.
II	4	3/4 (75.0%)	1/2 (50.0%)	One Stage II patient died of metastatic disease after 5 years.
III	7	4/6 (66.6%)	—	Two Stage III patients died within 6 months after surgery of metastasis. One Stage III patient died after 7 years of a stroke.
IV	5	(0%)		All Stage IV patients died within six months to one year.

\*The overall 5-year survival was 55.87%.

much larger series.<sup>3-5,7-9</sup> Grady Memorial Hospital, Chickasha, serves rural Oklahoma, and this series reflects the experience in a definitely different setting. The incidence of renal cell carcinoma is only 2% of all adult malignancies as compared to 3% in several large series. This difference may support the epidemiological contention that the tumor is more apt to occur in an urban dweller. However, it does appear that in a rural setting the malignancy manifests later, by a decade or so. The male vs female ratio of 2:1 certainly does not hold true in this series, as there were 16 females in a total of 36 patients.

Diagnosis made as a result of an IVP finding while investigating prostatism, hypertension, and urinary infection is very common and is reported in most series. Four of 36 tumors were discovered by general surgeons while performing a general surgical procedure. Thirty-three percent of cases in this series have been incidentally found tumors.

The advent of renal CAT scan probably obviates the need for the more invasive arteriography. However, arteriography is beneficial as an aid to surgery, since isolating and securing the renal vessels is a most important step in the operation. CAT scan results have made it unnecessary to infuse epinephrine and occasionally have confirmed the diagnosis of renal tumor in spite of an unremarkable arteriogram.

In this series, the results compare favorably with other large series (Table 4). Since the numbers are small, ten-year survival rates are not statistically significant. Moreover, since the peak age incidence in this series occurs a decade later than in other series, there are other factors competing with malignancy as a cause of death. It does appear that five-year survival with good quality of life at the age of 66.6 years is encouraging. Stage IV or metastatic disease has a poor prognosis. No Stage IV patient in

this series lived longer than one year. Adjuvant therapies have not proved beneficial.

## SUMMARY

A small series of renal cell carcinoma cases from Grady Memorial Hospital, Chickasha, Oklahoma, is compared and contrasted with selected series from larger urban medical centers. The results compare extremely favorably.

The study suggests that this rare tumor is probably rarer in a rural community and is likely to occur a decade of life later than it occurs in urban areas. The study also suggests that both sexes are equally prone to the malignancy. Because of the dearth of reports from comparable settings, one can only surmise about the possible variance of the natural history of renal cell carcinoma in an urban vs a rural setting.

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# Personal Observations Regarding Adenoidectomy

Donald R. Resler, MD

It has for some time been my impression that adenoidectomy is an important, often-ignored, factor to consider in the management of chronic persistent middle ear effusion. Indeed, the impression is frequently now held, and even expressed, that the adenoid has little to do with chronic recurrent disease in the middle ear and should seldom be removed. This fallacious and general impression was exposed and successfully refuted at the meeting of otolaryngology's senior society, The Triologic Society, held in Denver, Colorado on April 28, 1987. Dr George Gates, professor and head of the Division of Otorhinolaryngology—Head and Neck Surgery at the University of Texas Health Science Center in San Antonio, presented a paper entitled, "Effect of Adenoidectomy Upon Children with Chronic Otitis Media with Effusion." This paper represented the first well-documented, *long-term* study in recent years of children with persistent serous otitis media in relationship with adenoidectomy. This study was approached in a highly scientific manner with careful attention to statistical validation. I asked for and received the permission of Dr Gates to use materials of his study for this paper.

My purpose in writing this paper is to present my own professional observations and bring present-day facts to the medical community, and particularly the family physician, pediatrician, and otolaryngologist who most frequently see and treat these patients. Despite the fact that this is child-

hood's most common disease, the attention that has been given to this subject in the recent past has been extremely limited.

Little is known as to the exact function of the adenoids. The adenoids have been implicated as a causative factor of middle ear effusion. Gates pointed out that adenoids: (1) Obstruct the eustachian tube, both mechanically and functionally; (2) Obstruct the nasal airway leading to eustachian tube reflux; and (3) Act as a reservoir for pathogenic bacteria. The close proximity of the adenoids to the eustachian tube opening has implicated the adenoids as a causative factor in otitis media. A large adenoid mass may directly contribute to the reflux by posterior choanal obstruction and increased nasopharyngeal pressure. There is evidence (Teel et al<sup>2</sup> and Pillsbury et al<sup>3</sup>) to support the theory that there is a relationship of upper respiratory infections and acute otitis media with effusion. These factors are precursors of chronic middle ear effusion. The adenoids are important in this process.

In another paper, entitled "Effectiveness of Adenoidectomy and Tympanostomy Tubes in the Treatment of Chronic Otitis Media with Effusion,"<sup>4</sup> published by the *New England Journal of Medicine*, Gates outlines in detail his study of 578 randomly assigned, 4- to 8-year-old children who received bilateral myringotomies and either (1) no additional treatment, (2) tympanostomy tubes, (3) adenoidectomy, or (4) adenoidectomy and tympanostomy tubes. The 491 who accepted surgical treatment were monitored at six-week intervals for up to two years.

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Treatment effect was assessed by four main outcomes: Time with effusion, time with hearing loss, time with first recurrence with effusion, and number of surgical re-treatments.

The statistics and conclusions of this study prove that children affected with chronic otitis media with effusion *resistant to medical management* are improved with adenoidectomy. This study, in contrast to earlier studies, assessed the differences at multiple examinations. Using morbidity time as the chief outcome criterion, the percentage reduction in

***If energetic medical management has failed for three or four months, surgery should be considered.***

time of effusion varied from 27% to 45% by patient, and from 12% to 43% by ear. Although surgery does not totally cure patients with chronic otitis media with effusion, the pattern of recurrence and morbidity were altered significantly after adenoidectomy was performed in conjunction with the placement of tympanotomy tubes. The prevalence of bilateral effusion was less, hearing was improved, and *response of recurrent effusion to medical management* was more prompt.

It is Gate's judgment that these differences are substantial enough to justify the use of adenoidectomy as the primary surgical therapy for chronic otitis media with effusion when reasonable medical therapy and observation have failed and hearing loss persists. Given a lower incidence of recurrence and benefits of proper hearing acuity, he<sup>2</sup> suggests that this may be the most *cost effective* treatment.

I have just completed twenty-two years of private otorhinolaryngology practice. During the last few years, I have paid much closer attention to the adenoids in otitis media. I feel that surgery is proper only where medical management fails, and this generally represents the patients that I see in my practice. Many parents become very concerned with prolonged months of constant antibiotic therapy. Most parents worry about the potential damage to the child's hearing and the alteration of their immunological systems. In the younger child, speech development and learning are directly related to that

child's hearing properly. Extensive studies show that the brain feeds on sound for development. I see numerous examples of grades dropping at school for young students with middle ear effusion, only to see these grades return to normal after proper treatment. Speech development at age fifteen to thirty-six months can be severely impaired in children with middle ear fluid. Even unilateral hearing impairment during these years causes reduced cognitive ability.

Allergic respiratory disease in Oklahoma is a serious medical problem and certainly affects a child's nasal breathing capacity and eustachian tube function. This compounds the problem of adenoid hypertrophy. It is extremely important for the physician to know whether the patient mouth breathes or snores at night. It is not uncommon, after an adenoidectomy, for the parent to comment on how much better the patient breathes through the nose and how much easier the child sleeps at night. The use of adenoidectomy in younger children, to improve breathing and provide less nasopharyngeal obstruction, is extremely important.

It is therefore my conclusion that an adenoidectomy is a very important surgical consideration when medical management of middle ear effusion fails and tympanostomy tubes are being considered. I have observed this clinically and find much better results when I have performed an adenoidectomy where indicated. The study performed by Gates is an enormous foundational support to my clinical observation.


I am basically opposed to the placement of tympanostomy tubes without anesthesia. It is traumatic to the child, and the parent as well, for the child to be tied down and held while the tubes are being placed. Separating the parent and the child does not lessen the trauma to the child. I have seen a great number of these patients wherein the parent commented, "I will never let that be done again to my child." The complications from general anesthesia and the cost of the procedure on an outpatient basis are minimal.

In addition to this, it is very difficult to evaluate the younger child's adenoid fossa adequately without direct visualization utilizing general anesthesia. Therefore, direct nasopharyngeal examination with preparation to do an adenoidectomy is always reasonable when a procedure for placing tympanostomy tubes is planned on younger children. The complications of good anesthesia are very few and bleeding is very rare with an adenoidectomy;

therefore, mortality and morbidity by this procedure are minimal in well-trained hands. These facts suggest that the surgery of placing tympanostomy tubes in a patient in the office or an outpatient facility, as the primary treatment for middle ear effusion without evaluation of the adenoids, is no longer valid.

The size of the adenoids is not always the determining factor, according to Gates. Acting as a reservoir for bacteria is perhaps the most important role of the adenoids in the pathogenesis of otitis media. On the other hand, although a simultaneous tonsillectomy may be done if there is adequate reason to remove diseased tonsils, a tonsillectomy is not indicated solely on the basis of the management of otitis media.

It should be pointed out that this has important economic considerations. It is cost-effective to observe the above principals rather than treat the patient over a long period of time medically, and/or place tympanostomy tubes repeatedly in ears that will not eventually be adequately managed without adenoidectomy. Third-party payers should pay closer attention to these studies and facts.

In conclusion, long-term medical treatment alone, for many months, with failure to consider tympanostomy tubes and adenoidectomy in the patient suffering with chronic otitis media with effusion, is no longer appropriate. If energetic medical management has failed for three or four months, surgery should be considered. Many months of medical management may result in permanent ear damage and hearing loss. 

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*Donald R. Resler, MD, is an associate clinical professor in the Department of Otolaryngology, University of Oklahoma College of Medicine. He earned his medical degree at the university in 1960.*

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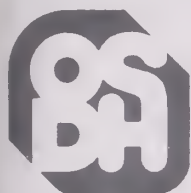
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## News from the Oklahoma State Department of Health

### High Blood Pressure: Improving Patient Compliance

Many physicians find it a constant challenge to help patients comply with instructions to control their high blood pressure. Some have found new and innovative ways to help patients adhere to treatment. Donald O. Fedder, DrPH, of the Office of Community Pharmacy Programs, University of Maryland, offers the following suggestions for improving adherence to treatment:

- Give specific instructions for all phases of treatment. Many physicians actually provide their patients with a written list.
- Have a good idea of how many modifiable risk factors patients have before establishing a treatment program.

- Set short-term goals for modifiable risk factors. For example, suggest that overweight patients try to lose three to four pounds by the next appointment. Avoid overwhelming them with 50-pound weight loss goals.

- Record small successes for patients. Reinforce any positive behaviors. Congratulate patients who lose two pounds, and discuss how to maintain and even increase that weight loss.

- Assess each individual's need for information, intervention, or reinforcement so that they can achieve their goal — to adhere to therapy and control their high blood pressure.

The Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure has just released its 1988 report, published in the May issue of *Archives of Internal Medicine*. Reprints are available from the National Heart, Lung, and Blood Institute, Box 120/80, Bethesda, MD 20892, attention Edward J. Roccella, PhD, coordinator. Copies of the report can also be obtained by calling the Chronic Disease and Eldercare Service, phone 405/271-4072. Staff members from this service are available to exchange information on high blood pressure patient compliance.



DISEASE	March 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	1	2
CAMPYLOBACTER INFECTIONS	6	21	29	31
ENCEPHALITIS, INFECTIOUS	1	1	5	5
GIARDIA INFECTIONS	14	33	38	44
GONORRHEA (Use ODH Form 228)	692	1805	2423	2911
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	26	55	32	46
HEPATITIS A	35	178	67	101
HEPATITIS B	21	62	37	47
HEPATITIS, NON-A-NON-B	5	12	5	11
HEPATITIS UNSPECIFIED	5	11	11	28
MEASLES (RUBEOLA)	1	8	1	1
MENINGITIS, ASEPTIC	2	6	8	10
MENINGITIS, BACTERIAL				
(non-meningococcal,				
non H. Influenzae)	1	3	10	20
MENINGOCOCCAL INFECTIONS	6	6	10	12
PERTUSSIS	22	22	25	20
RABIES (Animal)	1	5	5	18
ROCKY MOUNTAIN				
SPOTTED FEVER	1	1	0	1
RUBELLA	1	1	0	0
SALMONELLA INFECTIONS	19	48	40	64
SHIGELLA INFECTIONS	10	28	48	37
SYPHILIS (Use ODH Form 228)	11	43	41	46
TETANUS	0	0	0	0
TUBERCULOSIS	22	45	56	54
TULAREMIA	1	1	2	1
TYPHOID FEVER	0	0	1	0

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	34
BRUCELLOSIS	0
LEGIONNAIRES DISEASE	2
MALARIA	4
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	2

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# Modes of Transmission of the Human Immunodeficiency Virus

Gregory R. Istre, MD

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*Previous issues of the JOURNAL have included articles from members of the OSMA Ad Hoc Committee on AIDS, covering the topics of the virology, pathogenesis, and clinical aspects of AIDS. This paper will discuss the scientific evidence about transmission of AIDS and the Human Immunodeficiency Virus (HIV); a subsequent article will present the evidence for the lack of transmission of HIV by other modes.*

---

**A**bundant epidemiologic information indicates that the HIV is a difficult virus to transmit. Comparable data indicate that hepatitis B virus is twenty to fifty times as likely to be transmitted from an infected patient to a health care worker by a needlestick, for example. Like hepatitis B, HIV is transmitted in three ways: (1) sexually, (2) by blood contact, and (3) perinatally from an infected mother to her unborn or newborn infant.

## SEXUAL TRANSMISSION

Clearly, sexual intercourse is the route of transmission for the majority of persons with AIDS. Over three-quarters of all reported cases of AIDS in the US have occurred among homosexual or bisexual men, or heterosexual persons who had sexual intercourse with a person who either was HIV-infected or was in a high-risk category. Receptive anal intercourse is a major risk factor for HIV infection among homosexual men.

Heterosexual transmission of HIV has been documented to occur from man-to-woman and from

woman-to-man, through vaginal intercourse. Among regular heterosexual partners of HIV-infected persons, the rate of infection has been found to range from 9% to 71%. Genital ulcer diseases probably facilitate the transmission of the HIV, which may account for the staggering numbers of AIDS cases and HIV infections among heterosexuals in central Africa.

Having multiple partners increases the risk of HIV infection, probably because it increases the odds that at least one of the partners is infected.

## TRANSMISSION FROM BLOOD AND BLOOD PRODUCTS

Approximately one-fifth of reported cases of AIDS in the US have been acquired through exposure to blood or blood products. Most of these (17% of the total) have occurred among intravenous drug users who have shared needles with other users. Although blood transfusion recipients comprise 2% of that total, transmission of HIV through blood and blood products has been effectively eliminated in the US with the universal screening of all donated blood since March 1985. Likewise, transmission to hemophiliacs through Factor VIII concentrate has been effectively eliminated through heat treatment of that product since 1985.

Eighteen cases of HIV infection worldwide, including one individual who later developed AIDS, have been documented through exposure to blood in health care settings. The majority of these have resulted from needlestick injuries from needles used



on patients who were HIV-infected. The actual risk of acquiring HIV infection from such a needlestick injury is less than 0.5% per needlestick from infected patients; by comparison, the risk of hepatitis B under similar circumstances is 10% to 20%. A handful of cases of HIV infections from nonparenteral blood exposure in health care settings has occurred; however, the risk from such an exposure has not been quantified. This risk is almost certainly several-fold lower than the risk from a needlestick.

### PERINATAL TRANSMISSION

Approximately one percent of cases of AIDS have occurred among infants and children. Over three-quarters of these were acquired from an infected mother. Infection of the infant may occur *in utero* or at the time of birth. The risk of an infected mother transmitting HIV infection to her unborn or newborn infant is approximately 30% to 50%. With current technology, infection in the newborn is difficult to distinguish from maternally acquired antibodies, and may not be reliably achieved until 12 months of age or later, when maternal antibodies have dis-

appeared. At least one infant has probably acquired HIV infection from breast-feeding (the infant's mother was infected by a blood transfusion after delivery). However, other instances of mothers who breast-fed their infants and did not transmit HIV have also been reported.

### SUMMARY

Clear scientific evidence points to only three modes of transmission of HIV: (1) sexual — either homosexual or heterosexual intercourse; (2) by blood and blood products — predominantly through needle-sharing in IV drug use, with the next largest numbers having occurred from receipt of blood prior to HIV antibody screening in 1985; and (3) perinatally, from an infected mother to her infant either *in utero* or at the time of delivery.

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## DEATHS

Tony Willard Pratt, MD  
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OSMA Life Member Tony W. Pratt, MD, died April 21 in Tulsa. Dr Pratt, a retired general practitioner, was a native of Missouri but grew up in Texas. He earned his medical degree from the University of Oklahoma in 1938 and established his first practice in Miami, Okla, in 1941. In 1948 he moved to Muskogee, where he lived until his retirement in 1972.

## Know the symptoms

### **Annual onslaught of Rocky Mountain spotted fever begins**


Physicians, take heed. Oklahoma is well into its annual tick season, and Rocky Mountain spotted fever, a disease transmitted by ticks, is again becoming cause for concern.

State Commissioner of Health Joan K. Leavitt, MD, warns that in the past Oklahoma has had the nation's highest rate of Rocky Mountain spotted fever. The state averaged 124 cases a year for the five-year period ending December 1987, with 84 cases reported last year. Three deaths were attributed to the disease. Typically, most cases occurred from April to September, the period when more people are likely to be engaged in outdoor activities.

"Early recognition and treatment is necessary in order to reduce the severity of Rocky Mountain spotted fever," Dr Leavitt says. "If a person develops

fever within 14 days of tick exposure, medical attention should be sought immediately, and in all cases should be reported to the local health department."

Rocky Mountain spotted fever is characterized by sudden onset of fever, chills, weakness, severe headache, and muscle aches. By about the third day, a rash may appear on the patient's arms and legs, spreading to the trunk and possibly the palms and soles.

The rash, when it occurs, is a distinguishing characteristic. However, the disease can occur without the rash and "should be suspected if a person has fever, headache, muscle aches, and has had a tick bite, or has been in a tick-infested area within the two weeks prior to illness," advises Dr Leavitt. 

## You bet your life

### **AIDS protection: Best bet for safe sex is low-risk partner**

Current recommendations for preventing the spread of AIDS among heterosexuals don't emphasize enough the importance of choosing one's sexual partners carefully, says a report from San Francisco.

Advising sexually active people to reduce their number of sexual contacts, use condoms, and avoid anal intercourse and other high-risk practices makes sense, but it is not nearly as important as telling them to avoid sexual contact with anyone who may be at high risk for HIV infection, say authors Norman Hearst, MD, MPH, and Stephen Hulley, MD, MPH, of the University of California-San Francisco.

For example, choosing a partner who is not at high risk cuts the odds of acquiring HIV infection about 5,000-fold compared with choosing a partner at highest risk, they say. Using a condom provides only a 10-fold risk reduction, they estimate, saying

the emphasis on condom use may give people a false sense of security while they continue to engage in sexual activities with high-risk partners. Even if condoms were 99% effective, the risk status of one's partner is far more important than whether one uses condoms, the authors say.

Based on studies of armed forces recruits and blood donors, the authors put the prevalence of HIV infection among low-risk persons at about 1/10,000. Studies of female partners of HIV-infected men show the risk of infection through vaginal intercourse with an infected partner is 1/500 or less for each sexual contact, they say. The risk of infection through sex with a partner who is not a member of a high-risk group is only about 1 in 5 million for each sexual contact, even without a condom. Put another way, "the risk of AIDS from a low-risk sexual encounter



## Best bet (continued)

is less than the risk of being killed in a traffic accident while driving 10 miles on the way to that encounter."


Anal intercourse may be somewhat more efficient in spreading HIV than vaginal intercourse but, like sex without a condom, it is not a high-risk activity unless done with a high-risk partner, the authors say. Relying on a negative HIV test result in those not currently practicing high-risk activities can cut the risk by 99% — good but not foolproof, they note.

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They also point out that "people can lie about having had an HIV antibody test or about the results of that test even more easily than they can hide their membership in a high-risk group."

The authors acknowledge the difficulty of judging a potential partner's risk status without knowing the partner very well. "This means not only asking potential partners about their present and past behavior but also getting to know the person and his or her friends and family well enough to know whether to believe the answers."

Advising the public to use condoms, reduce the number of sexual contacts, and avoid anal intercourse has merit, the authors say. "However, it is the physician's responsibility to give not only good advice but the best advice. Doing otherwise not only gives less than the maximum benefit but may actually do harm. Giving people advice they decide not to follow (eg, using condoms) may make them disregard other advice that is more important and may be more acceptable — to choose their partners carefully."

The report appears in the April 22 issue of the *Journal of the American Medical Association*. 

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## Meaning of HIV test result varies with donor's history

A recent report from Pennsylvania proposes a number of suggestions for improving the accuracy and usefulness of human immunodeficiency virus (HIV) testing.

Among the report's recommendations are the institution of mandatory, unannounced proficiency testing of clinical laboratories that perform HIV tests, the licensure of reference laboratories, and the routine monitoring of test kits to ensure the reliability of HIV testing.

The authors, J. Sanford Schwartz, MD, of the University of Pennsylvania, Philadelphia, and colleagues, also suggest strategies for improving the use of HIV tests, whether they are used for screening, case-finding, or diagnostic purposes.

The authors point out that the prevalence of the virus in the population should be considered when interpreting test results since the prevalence can greatly affect the probability that a reactive enzyme-linked immunoassay (EIA) test corresponds to a true-positive. For example, repeatedly reactive EIA results from tests of a low-risk blood donor (prevalence of 30 infected persons per 100,000) indicates that the person has about a 27% probability of being infected with HIV. However, the same test results for a patient from a methadone clinic (where the prevalence of HIV infection is 45,000 per 100,000) indicate a 99.9% probability that the person is infected, the authors say.

The authors also recommend that clinically appropriate criteria for interpreting tests also be tailored to the reason for their use. Blood banks, for example, use two different standards for interpreting test results: When deciding whether donated blood is safe, blood banks use the criteria of repeated EIA reactivity, which favors sensitivity over specificity. As a result, many noninfected units of blood are discarded to minimize the chance of exposing patients to infected blood or blood products. Conversely, blood banks require a positive Western blot result, with its greater specificity, in addition to repeatedly reactive EIA results before they will notify a donor that he or she is infected with HIV.

The authors also address the cost effectiveness of widespread mandatory HIV testing. "Apart from ethical and legal issues, the benefit of HIV testing to public health derives from appropriate behavior by tested individuals and thus requires patient

compliance and cooperation. Patient consent should be obtained in all but the most exceptional circumstances. All individuals undergoing testing must be provided with appropriate counseling so that they adequately understand the implications of both positive and negative test results," they write.

The report appeared in the May 6 issue of the *Journal of the American Medical Association*. □

### IN MEMORIAM

#### 1987

<i>Odis A. Cook, MD</i>	<i>April 4</i>
<i>Lawrence Edward Silvey, MD</i>	<i>April 9</i>
<i>Victor Gary Anderson, MD</i>	<i>April 10</i>
<i>Edgar W. Young, Jr., MD</i>	<i>April 12</i>
<i>Paul Newman Atkins, Jr., MD</i>	<i>April 20</i>
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<i>Alwin Marshal Clarkson, MD</i>	<i>September 1</i>
<i>Rex Elmer Kenyon, MD</i>	<i>September 16</i>
<i>Charles P. Bondurant, Jr., MD</i>	<i>October 12</i>
<i>James C. Smith, Jr., MD</i>	<i>December 30</i>

#### 1988

<i>Charles Stewart Cunningham, MD</i>	<i>January 1</i>
<i>Charles Wallace Coyner, MD</i>	<i>January 4</i>
<i>Glen Franklin Wade, MD</i>	<i>January 12</i>
<i>Frank Cornwell Lattimore, MD</i>	<i>January 30</i>
<i>Leo Lowbeer, MD</i>	<i>February 3</i>
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<i>Jay P. Irby, MD</i>	<i>February 25</i>
<i>James William Finch, MD</i>	<i>March 4</i>
<i>John Junior Donnell, MD</i>	<i>March 7</i>
<i>Tony Willard Pratt, MD</i>	<i>April 21</i>

### Medical Dilettantes?

This mini-essay is precipitated, I confess at the outset, by the editorial entitled "Certifying Dilettantes" which led off the February, 1988 issue of this journal. In venturing opposing views I am well aware that I may be baiting the lion in his den, for he does still retain his editorial prerogative of putting in the last word. Surely, though, there is room for honest dissent. I am confident that my friend and esteemed editor, MRJ, will agree that it deserves to be heard.

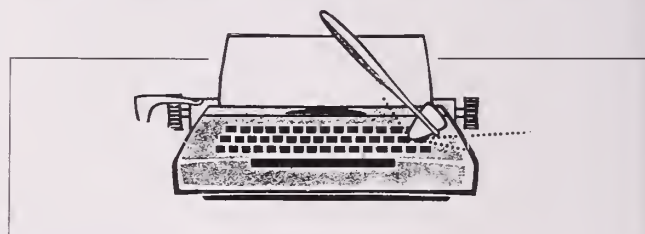
If one reads that editorial with more than casual discernment, it boils down to a critique, if not a condemnation, of present and proposed criteria for recertification (and, presumably, certification) of the most examined group in the world, the medical profession. Especially singled out is the field of continuing medical education in which we, among all professions, have achieved preeminence. With a broad brush it is contended that existing CME programs are "decidedly inadequate to the task of true validation of the practitioner's competency," that they are in a "dangerous drift toward the certification of dilettante physicians." We are given the picture of an elite group, unattuned to the real world of patient care, intent on nurturing their ilk irrespective of actual proficiency in the art of medicine. Specifically, their domineering influence on the system of CME credit requirements "obviously does nothing to reveal the personal attributes, attitudes, emotional stability, physical health, or cultural compatibility of the physician who earns them."

Certainly that is a somber, conspicuously negative appraisal of the progress which has so distinguished American medicine over the last half century. As a clinician who has spent twenty-five years on the full-time faculties of two medical schools, with a major responsibility in CME, I rise to protest that the system is not going to hell in the proverbial handbasket, that all is not lost, that it does not require emergency surgery but rather does continue to play an ever increasing role in fostering better medical care. There is another side to the picture, one in which we can all be proud.

True, there is always room for improvement. All the deficiencies cited above have of course been pondered by the best minds in the business. But attempts to address those problems must start somewhere, and in this case it was doubtless at the generally lower level of state licensure. In that, we have evolved from the diploma mill era to a brave,

though regrettably not universally accepted, attempt at a national examination. (One of the several state licensure ordeals I encountered actually posed, in print, the questions: How many red blood cells in the human body? How many alveoli in the lung?) Then came specialty certification, initially condemned for tinges of favoritism, unionism, elitism, now embraced by all fields of medicine, including general practice. All these rose from written tests well laden with trick questions and minutiae (really, now, who really read all that stuff?), to today's two- or even three-day interrogations including the personal confrontation of oral quizzing and actual patient examinations, problem solving, and the more objective methods involving interpretation of laboratory data, x-rays, tracings, pathologic specimens, and now audio and video recordings of clinical relevance.

Ditto, to some extent, with recertification. Earnest efforts have been and are being made on many fronts to find out what are the requisites for compe-



tency. Surveys ad infinitum, by universities, specialty societies, the AMA, and even state medical associations seek out areas of particular interest to practitioners. A highly successful innovation by the American College of Physicians in the late 1960s was its voluntary and confidential "Self Assessment" examinations, now going into an eighth edition, striving to not only measure cognitive knowledge but also to disclose the physician's blind spots, directing him to areas needing further study for periodic recertification, for greater mastery of his specialty, or simply for his own satisfaction and reassurance.

From the privilege of personal participation in the birth and early development of both the Self Assessment and the recertification programs of ACP, I can attest to the fact that they were not solely products of an elite corps of academicians, that those ranks were well fortified with doctors immersed in private practice. (It may come as no surprise that the continued success of the ACP's postgraduate courses is due in large part of its closely guarded roster of teachers who can communicate most effec-



tively, culled from audience surveys at the end of courses.)

Let it be noted that attendees at CME offerings are not captive audiences. They pay in precious time and money. Their presence bespeaks a right to demand relevant, useful, timely information, well presented. Quite aside from the token meetings contrived for vacation jaunts, the best offerings of continuing medical education are fully subscribed months in advance. They must be doing something right.

Admittedly there are shortcomings in even the best of our efforts. Criticism comes easier than construction; nevertheless, it can serve to stimulate improvement. And in defense, the good old trial and error method is not foreign to education. Let's look at the alleged inadequacies of our present programs. The editorial contends that they fail to reveal:

— personal attributes, attitudes and emotional stability of physician applicants. That is a large order. Teachers and colleagues with years of close association often fail on that score. And on brief encounters, who is perceptive, wise and bold enough to assume infallible judgment? Responsibility for such potentially far reaching decisions may be diluted by sharing with the opinions of others but they, too, are not immune to subjective distortion, preconceived bias, impulse and personality conflicts.

— physical health. Is an all out evaluation of that appropriate or feasible here? And if disability should be found, is that necessarily fit grounds for rejection? It is the handicapped to which our society characteristically gives special privilege. Cases of addiction disability are, of course, properly left to local committees and boards of organized medicine which, we trust, will deal justly and helpfully with our errant brothers.

— "cultural compatibility" of the physician? That's a tough one, a bit vague, probably referable to judgments independent of "race, creed, national origin, sex" (we should say gender). Medical education does itself impose a certain natural selection as to cultural and social background. Ideally, examiners should focus on demonstrated performance.

Certainly there are no easy answers. Doubtless we do fall short at times on these and other counts. Judgments of a physician's basic character, his motivation, compassion, ethics, emotional and mental stability are not easily and reliably arrived at in the absence of overt abnormality. Nor can they be relegated to computers, as some admissions committees would like to do. Maybe we do need to cultivate

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## Reaction Time (continued)

a greater sensitivity, more easily said than done.

The editorial's final charge, that of ignorance of "the countless laws, rules and regulations which govern practice," is more amenable to correction. Those matters never did turn us on in medical school, and they do have a way of getting lost in the dust of passing years. If we perchance err in writing a prescription, we trust to the alertness and benevolence of the pharmacist. But in a way, he too passes the buck — to the pharmaceutical industry as he counts rather than compounds his pills while his mortar and pestle gather dust. Granted, though, that there is a need for instruction in those rules, regulations and prescriptions, how many busy practitioners would sign up for it? Unfortunately, needs do not always translate into demand in the educational marketplace.

"Worse than all these shortcomings," the editorial complains, is the specter of certification administered by essentially non-practicing physicians, to others equally unfamiliar with care "of even one patient, ever, since leaving the structured, academic, post-

graduate program." Medical school faculties do, of course, have large contingents of Clinical Professors whose contributions are sought and recognized as complementary, to the advantage of all concerned, not least the student. And full-time academics at clinical levels certainly see their share of patients in their clinics and hospitals. Also they are in the business of teaching and testing. Who more appropriate to provide leadership in postgraduate teaching and certification?

In the final analysis, continuing education must succeed or fail in its buyer's market on quality, not on any system of credits. If it treats its "patients" with prescriptions that are palatable, as well as helpful and of acceptable standards, it wins, both with the written and spoken word.

Let's face it, some journal entries are tough going, almost unreadable. It was the late Sir Theodore Fox, editor of *Lancet*, whose admonition to authors rings out, "Be accurate if you can, but whatever happens, don't let yourself be dull." Lois DeBakey and so many other heroes of the editorial desk daily scrub up innumerable manuscripts correcting not just grammar and punctuation but emphasizing clarity, organi-



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zation, and yes, attractiveness. Mayo's Richard Hewitt ("it isn't just good writing, but good rewriting") wrote a book for medical authors deploring those tired clichés that creep into our scientific jargon, those long, stilted, awkward sentences, substituting studied complexity for simple, straightforward expression. Wading through such writing, one comes away with the impression of an author convinced that it has to hurt to be truly scientific. Few authors can aspire to the directness and clarity of your Editor-in-Chief.

The same ills and more afflict some vocal presentations. We owe a debt to the course directors and program chairmen who protect us from hopelessly cluttered slides, from speakers who pompously talk down to the audience, or those who ramble on oblivious of time. Medical speakers may not be as articulate as politicians or (God forbid!) television evangelists, but most can give a creditable performance. (Any doubter should sit in on a session of, for example, electrical engineers). But we can do better.

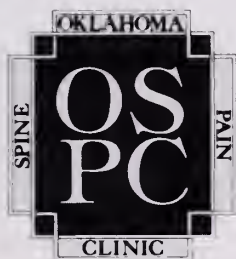
Skills of writing and speaking can be taught and practiced to advantage. And all the papers and programs in the world will fail if they are not interest-

ing. State journals, which have lost to national publications much of their clout as sources for the latest and best in scientific advances, can serve a useful role by identifying areas of need, publicizing, evaluating and offering constructive collaboration in CME at the state level.

Surely few would contend that we have not improved the quality as well as abundance of continuing education in recent decades, including prominently the innovations of audio and video tapes, satellite television, and now computers — instruments which like ultrasound and magnetic resonance imaging, have broadened our horizons.

Webster defines *dilettante* (apparently from the Latin, *dilettare*, to delight) as "one who is a lover of the arts, or who cultivates an art or branch of knowledge as a pastime." If that denotes a perfectionistic flair, so be it, for the trust of caring for the sick places a premium on perfectionism. It behooves us to be content with no less. *Dilettante*, after all, is not necessarily a bad word.

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## BOOK SHOP

**City Hospitals: The Undercare of the Underprivileged.** By Harry F. Dowling. Cambridge, Mass.: Harvard University Press, 1982, pp 245, price \$22.50.

Dr Harry F. Dowling, distinguished medical educator-clinician, has written a history of several public hospitals. He has defined city hospitals to include the variety of governmental institutions operating under municipal, county, or state auspices which provided health care to a generally indigent population.

The book discusses the rise and decline of city hospitals from colonial times to the present. The author believes that the role of the public hospital both in serving the poor and in contributing to medical education and research has been neglected and makes a strong case for this view.

Dr Dowling has provided histories of the Baltimore City Hospitals, Boston City Hospital, the Cook County Hospital, the DC General Hospital, and to a lesser extent, the Bellevue Hospital. He was associated for varying periods with the first four. He has provided a great deal of valuable information concerning not only the history of these institutions but other information, including the names of associated physicians, the development of diagnostic and therapeutic procedures, and relationships with city political figures.

An important aspect of the book is the author's description of the evolution of these five public hospitals in three definitive stages. The first, the practitioner period, extended from colonial times to 1910 and represented the period when public hospitals were primarily extensions of individual clinicians. During the academic period, from 1910 to about 1960, the hospitals became increasingly affiliated with medical schools. The community period, which extends from 1960 to the present, was characterized by attempts to integrate the public hospital into the overall medical care system.

The author has summarized well the history of medical education in relation to city hospitals and the roles of house staff and of attending physicians. He has also pointed out the contributions in medicine made at certain public hospitals. Dr Dowling obviously believes strongly in the benefits to be gained by affiliation of the hospital with a medical school.

It is interesting to read that in 1925 the average cost per patient per day in six public hospitals was \$3.39 as compared to \$6.64 in eight private hospitals (page 149).

The final chapter, entitled "Problems, Protests and Possible Solutions," discusses many aspects of hospital problems and how solutions might be reached.

Some will criticize the fact that other city hospitals were not discussed in depth, and others may question the lack of discussion of the role of professional hospital administrators. Overall, however, this is an interesting, unique, and valuable book.

*Harris D. Riley, Jr., MD  
Oklahoma City*

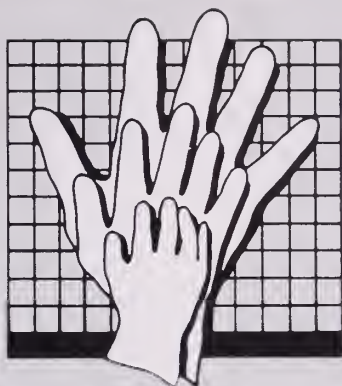
**The Febrile Child: Clinical Management of Fever and Other Types of Pyrexia.** By Martin J. Lorin. New York, etc: John Wiley and Sons, 1982, pp 246, price \$34.50.

This monograph treats comprehensively the subject of fever and other elevated body temperatures, with particular reference to their occurrence in children. The book is divided into three major sections. The first, "Pathophysiology," consists of four chapters covering temperature regulation and hemoethermy, the pathophysiology of fever, and whether fever is beneficial or detrimental. The book begins with a clarification of the distinction between fever, defined as that condition in which the body thermoregulates an increase in core temperature in response to a disease or other insult, and other types of body temperature elevation such as heat illness and normal variation of body temperature. This section contains a very interesting discussion of temperature regulation in the role of the thermoregulatory center of the central nervous system.

Part 2, "Clinical Relevance," consists of eight chapters dealing with such topics as clinical measurement of body temperature; fever without localizing signs; fever of undetermined origin; fever in the abnormal host; fever in the critically ill child; fever due to drugs, toxins, and poisons; febrile convulsions; and heat illness. While the author discusses means of measuring temperature, he does not make firm recommendations about a preferred method. There is a discussion of the innumerable causes of fever without localization and possible causes of fever of undetermined origin. According to the literature cited by Lorin, about two-fifths of instances of fever of undetermined origin are accounted for by infection, with another two-fifths due to neoplasm and connective tissue disorders. The remainder usually go undiagnosed, but the author

*(continued on p 379)*





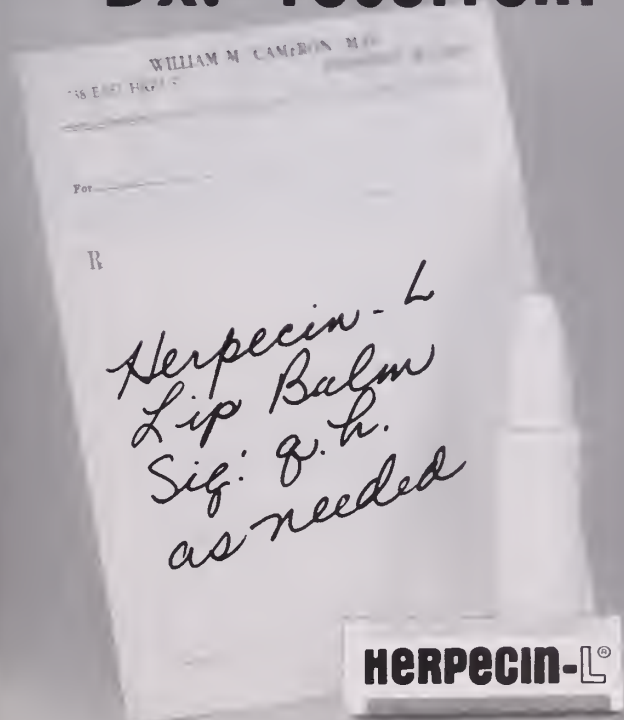
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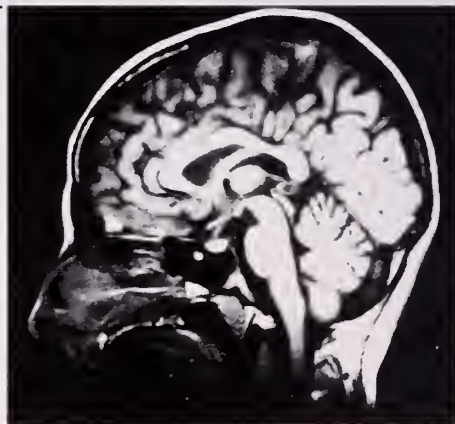
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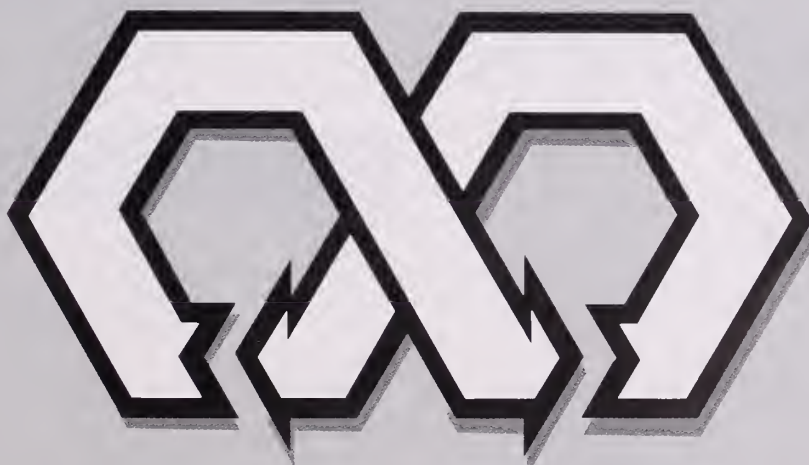
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# A NEW H<sub>2</sub> Antagonist

# AXID<sup>®</sup> 300mg

## nizatidine

Effective once-nightly  
duodenal ulcer therapy available in a  
**Unique Convenience Pak**  
for better patient compliance



### AXID<sup>®</sup> nizatidine capsules

**Brief Summary.** Consult the package insert for prescribing information.

**Indications and Usage:** Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg b.i.d. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

**Contraindication:** Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H<sub>2</sub>-receptor antagonists.

**Precautions:** General—1 Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2 Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3 Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

**Laboratory Tests**—False-positive tests for urobilinogen with Multistix<sup>®</sup> may occur during therapy with nizatidine.

**Drug Interactions**—No interactions have been observed between Axid and theophylline, chlorazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

**Carcinogenesis, Mutagenesis, Impairment of Fertility**—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

**Pregnancy—Teratogenic Effects—Pregnancy Category C**—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers**—Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

**Pediatric Use**—Safety and effectiveness in children have not been established. Use in Elderly Patients—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

**Adverse Reactions:** Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

**Hepatic**—Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

**Cardiovascular**—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

**Endocrine**—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

**Hematologic**—Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H<sub>2</sub>-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

**Integumental**—Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

**Other**—Hyperuricemia unassociated with gout or nephrolithiasis was reported.

**Overdosage:** There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD<sub>50</sub> values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Axid<sup>®</sup> (nizatidine, Lilly)



**Eli Lilly and Company**  
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## Book Shop (continued)

points out that the long-term effect of these undiagnosed examples is relatively benign.

Part 3 is entitled "Symptomatic Therapy" and discusses the rational treatment of elevations of body temperature, and the use of antipyretic and hypothermic drugs and of physical cooling.

In areas of controversy, both sides of the question are usually well presented. Each chapter contains references which are well chosen and generally up to date. The discussion of management of febrile convulsions is indecisive. The book is too detailed for most physicians, but those who have a particular interest in this problem will find it a useful reference.

*Harris D. Riley, Jr., MD  
Oklahoma City*

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Miscellaneous advertising is available at the rate of \$11 per month per vertical inch or any portion thereof (ie, 1-7 lines is \$11, 8-14 lines is \$22, etc). Rates are not prorated for fractions of an inch. One inch of space contains 7 lines of copy averaging 55 characters each. The first line of the ad will automatically be set in all capital letters and averages only 38 characters. Count every letter, space, and punctuation mark as a character.

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*(continued on p 381)*



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### Contributions

Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc, are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

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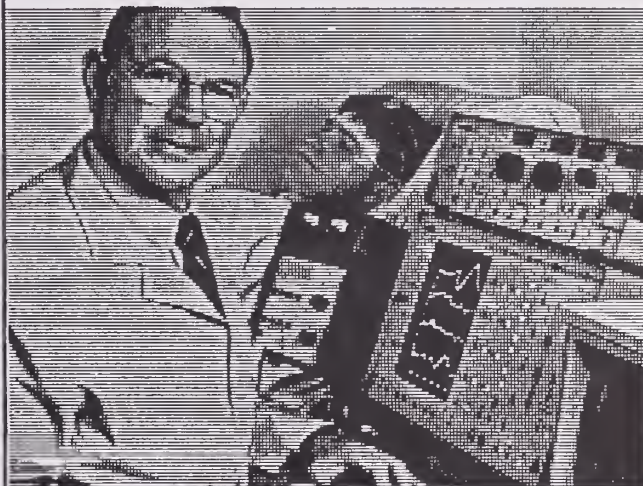
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## THE LAST WORD

■ **E. William Allen, MD, Oklahoma City**, has been voted president-elect of the American College of Nuclear Medicine. Dr Allen, director of nuclear medicine services at Oklahoma Medical Center, was elected at the college's recent convention. He will become president of the 1,200-member organization in February 1989.

■ **R. W. Neal, MD, Tulsa, Oklahoma governor** for the American College of Cardiology (ACC), was recently voted chairman-elect of the college's Board of Governors. He will assume the chairmanship in March 1989, at the ACC's next annual meeting. The current board consists of 59 governors from the United States and six from Mexico and Canada.

■ **On May 10, Oklahoma Teaching Hospitals** officially became Oklahoma Medical Center. Explaining the name change, Bobby Thompson, chief executive officer of the center, said, "We're not just teaching hospitals or research centers, we're both of these and more." A new logo has also been selected for the Oklahoma City entity, which includes Oklahoma Memorial Hospital, Children's Hospital of Oklahoma (formerly Oklahoma Children's Memorial Hospital), O'Donoghue Rehabilitation Institute, and the Child Study Center.

■ **Despite great success in controlling mumps** in the United States since the 1967 licensure of a live virus vaccine, there has been a relative resurgence of mumps in this country since 1986, largely affecting older age groups, says a report in May's *American Journal of Diseases of Children (AJDC)*. However, the problem does not appear to be due to waning vaccine-induced immunity, but rather to "a failure to vaccinate all susceptible persons, especially those who are now between 10 and 19 years old," says the study by Stephen L. Cochi, MD, of the Centers for Disease Control, Atlanta, and colleagues. The authors note it took 10 years after the vaccine's approval for it to be endorsed as a routine childhood immunization. At the same time, mumps incidence declined, "resulting in a relatively underimmunized cohort of children born between 1967 and 1977." The authors suggest using school immunization laws "to deal with the problem of continuing susceptibility in school-aged populations."

■ **State physicians can now order a new error codes listing** from Unisys, processor of Medicaid claims in Oklahoma. The codes are designed to help physician providers understand why claims are denied and how to correct them. Orders for the new listing should be directed to the Unisys Provider Relations Department, (405) 521-8730 or 1-800-522-8357.

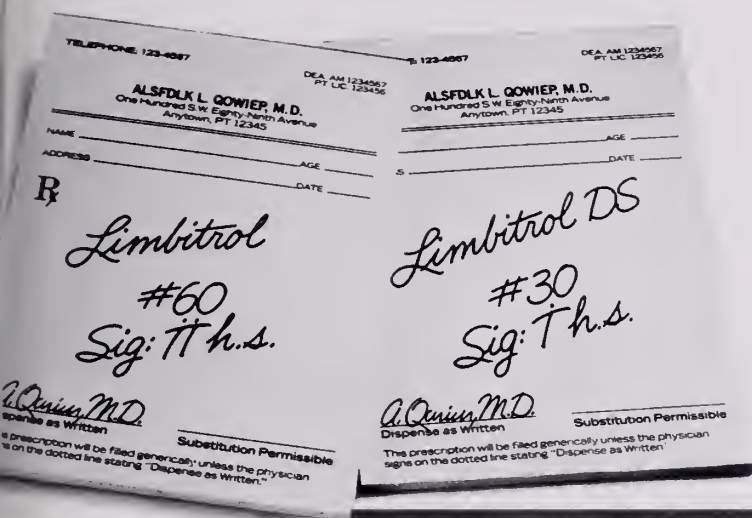
■ **IMPACT, Individual Medical Political Action Contributions Together**, is a new organization designed to generate funds for those political candidates who support medicine's objectives. IMPACT participants simply agree to contribute a personal check to their legislator or to a challenger. Contributors will be called once every two years and asked to mail their \$100 check at that time. IMPACT is not a political action committee; it is individuals contributing to individuals who support the medical profession. For information on how you can participate, see the April issue of *OSMA News* or contact Robert Baker at OSMA headquarters, (405) 843-9571 or 1-800-522-9452.

■ **Dinitrochlorobenzene (DNCB) is being touted** by some as an immune system-boosting therapy for human immunodeficiency virus (HIV) infection, but a letter in April's *Archives of Dermatology* warns that it can cause a severe skin rash. Cornelis A. M. Reitmeijer, MD, and David L. Cohn, MD, of the Denver Disease Control Service, Denver, describe a case of severe allergic contact dermatitis in a 29-year-old man who used DNCB as an "alternative" treatment for his HIV infection. DNCB is a strong contact allergen—hence the rationale for its use as an immune function stimulator. A DNCB treatment protocol described and circulating in the gay community suggests applying it to alternate upper arms weekly, the authors say, but their patient applied it much more frequently, and the severe rash resulted. There are a number of safety questions surrounding DNCB, and its supposed success in HIV is based on limited anecdotal evidence, the authors note. "Since DNCB has gained popularity as an alternative treatment in HIV infection, severe reactions may be seen more frequently if DNCB is used inappropriately," they caution. □



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**References:** 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

### Limbitrol<sup>®</sup>

#### Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

**Warnings:** Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose\* packages of 100; Prescription Paks of 50.



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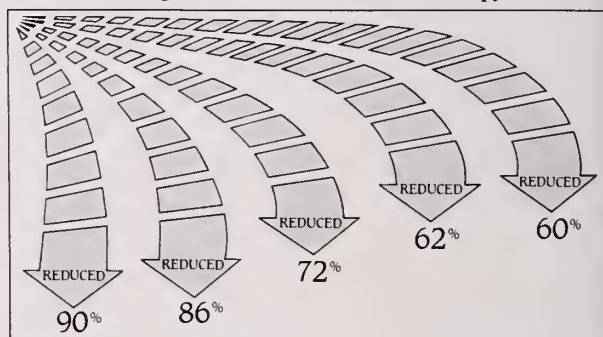
# See Improvement In The First Week<sup>1</sup>

And The Weeks That Follow

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Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy\*



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Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (N)

## Limbitrol DS<sup>®</sup>

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (N)

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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION  
JULY 1988



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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION

JULY 1988

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## ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,  
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**EDUCATION** Ithaca College, B.A. (Magna Cum Laude);  
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**OUTSTANDING ACHIEVEMENTS** Olsen Memorial  
Fellowship, National Masonic Medical Research Foundation;  
Albert Schweitzer Fellowship, International Albert Schweitzer  
Foundation; Harvard Medical School Cabot Prize for Best  
Senior Thesis; recently published article, "Who Shall Live  
and Who Shall Die" in Newsweek Magazine.



“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells—without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General.”

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Soldier being examined for effects of high-altitude cerebral edema.



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duodenal ulcer therapy available in a  
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### AXID<sup>®</sup>

nizatidine capsules

**Brief Summary.** Consult the package insert for prescribing information.

**Indications and Usage:** Axid is indicated for up to eight weeks for the treatment of active duodenal ulcer. In most patients, the ulcer will heal within four weeks.

Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg b.i.d. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

**Contraindication:** Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other  $H_2$ -receptor antagonists.

**Precautions:** General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

**Laboratory Tests**—False-positive tests for urobilinogen with Multistix<sup>®</sup> may occur during therapy with nizatidine.

**Drug Interactions**—No interactions have been observed between Axid and theophylline, chlorazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

**Carcinogenesis, Mutagenesis, Impairment of Fertility**—A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, perinatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

**Pregnancy—Teratogenic Effects—Pregnancy Category C**—Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belled rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers**—Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

**Pediatric Use**—Safety and effectiveness in children have not been established. **Use in Elderly Patients**—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

**Adverse Reactions:** Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

**Hepatic**—Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT (AST), SGPT (ALT), or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

**Cardiovascular**—In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

**Endocrine**—Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecostasia occurred.

**Hematologic**—Fatal thrombocytopenia was reported in a patient who was treated with Axid and another  $H_2$ -receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

**Integumental**—Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

**Other**—Hyperuricemia unassociated with gout or nephrolithiasis was reported.

**Overdosage:** There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD<sub>50</sub> values in the rat and mouse were 301 mg/kg and 232 mg/kg, respectively. PV 2091 AMP [041288]

Axid<sup>®</sup> (nizatidine, Lilly)



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\*Based on worldwide sales data on file, CIBA Pharmaceutical Company.  
Capsule or tablet slow-release potassium chloride preparations should be reserved for patients who cannot tolerate, refuse to take, or have compliance problems with liquid or effervescent potassium preparations because of reports of intestinal and gastric ulceration and bleeding with slow-release KCl preparations.

Before prescribing, please consult Brief Prescribing Information on next page.



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†Pooled mean serum potassium following oral administration of 30 mEq K-Tab compared to 24 mEq Slow-K in diuretic-treated hypertensives (n = 20) over 8 weeks.

C I B A

**References:** 1. Data on file, CIBA Pharmaceutical Company. 2. Skoutakis VA, Acchiardo SR, Wojciechowski NJ, et al: Liquid and solid potassium chloride. Bioavailability and safety. *Pharmacotherapy* 1980;4(6):392-397. 3. Skoutakis VA, Carter CA, Acchiardo SR. Therapeutic assessment of Slow-K and K-Tab potassium chloride formulations in hypertensive patients treated with thiazide diuretics. *Drug Intell Clin Pharm* 1987;21:436-440.

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BRIEF SUMMARY (FOR FULL PRESCRIBING INFORMATION SEE PACKAGE INSERT)

**INDICATIONS AND USAGE**  
BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis; in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For prevention of potassium depletion when the dietary intake of potassium is inadequate in the following conditions: patients receiving digitalis and diuretics for congestive heart failure; hepatic cirrhosis with ascites; states of aldosterone excess with normal renal function; potassium-losing nephropathy; and certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

#### CONTRAINDICATIONS

Potassium supplements are contraindicated in patients with hyperkalemia, since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene) (see OVERDOSAGE).

All solid dosage forms of potassium supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation. Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to an enlarged left atrium.

#### WARNINGS

**Hyperkalemia** (See OVERDOSAGE)

In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic.

The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

#### Interaction With Potassium-Sparing Diuretics

Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene), since the simultaneous administration of these agents can produce severe hyperkalemia.

#### Gastrointestinal Lesions

Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage, or perforation. Slow-K is a wax-matrix tablet formulated to provide a controlled rate of release of potassium chloride and thus to minimize the possibility of a high local concentration of potassium ion near the bowel wall. While the reported frequency of small-bowel lesions is much less with wax-matrix tablets (less than one per 100,000 patient-years) than with enteric-coated potassium chloride tablets (40-50 per 100,000 patient-years) cases associated with wax-matrix tablets have been reported both in foreign countries and in the United States. In addition, perhaps because the wax-matrix preparations are not enteric-coated and release potassium in the stomach, there have been reports of upper gastrointestinal bleeding associated with these products. The total number of gastrointestinal lesions remains approximately one per 100,000 patient-years. Slow-K should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

#### Metabolic Acidosis

Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, or potassium acetate.

#### PRECAUTIONS

##### General:

The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis *per se* can produce hypokalemia in the absence of a deficit in total body potassium, while acute acidosis *per se* can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium.

##### Information for Patients

Physicians should consider reminding the patient of the following:

To take each dose without crushing, chewing, or sucking the tablets.  
To take this medicine only as directed. This is especially important if the patient is also taking both diuretics and digitalis preparations.  
To check with the physician if there is trouble swallowing tablets or if the tablets seem to stick in the throat.

To check with the doctor at once if tarry stools or other evidence of gastrointestinal bleeding is noticed.

##### Laboratory Tests

Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

##### Drug Interactions

Potassium-sparing diuretics: see WARNINGS.

##### Carcinogenesis, Mutagenesis, Impairment of Fertility

Long-term carcinogenicity studies in animals have not been performed.

##### Pregnancy Category C

Animal reproduction studies have not been conducted with Slow-K. It is also not known whether Slow-K can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Slow-K should be given to a pregnant woman only if clearly needed.

##### Nursing Mothers

The normal potassium ion content of human milk is about 13 mEq/L. It is not known if Slow-K has an effect on this content. Caution should be exercised when Slow-K is administered to a nursing woman.

#### Pediatric Use

Safety and effectiveness in children have not been established.

#### ADVERSE REACTIONS

One of the most severe adverse effects is hyperkalemia (see CONTRAINDICATIONS, WARNINGS, and OVERDOSAGE). There also have been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see CONTRAINDICATIONS and WARNINGS); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

#### OVERDOSAGE

The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see CONTRAINDICATIONS and WARNINGS). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration (6.5-8.0 mEq/L) and characteristic electrocardiographic changes (peaking of T waves, loss of P wave, depression of S-T segment, and prolongation of the Q-T interval). Late manifestations include muscle paralysis and cardiovascular collapse from cardiac arrest (9-12 mEq/L).

Treatment measures for hyperkalemia include the following: (1) elimination of foods and medications containing potassium and of potassium-sparing diuretics; (2) intravenous administration of 300-500 ml/hr of 10% dextrose solution containing 10-20 units of insulin per 1,000 ml; (3) correction of acidosis, if present, with intravenous sodium bicarbonate; (4) use of exchange resins, hemodialysis, or peritoneal dialysis.

In treating hyperkalemia in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

#### DOSEAGE AND ADMINISTRATION

The usual dietary intake of potassium by the average adult is 40-80 mEq per day. Potassium depletion sufficient to cause hypokalemia usually requires the loss of 200 or more mEq of potassium from the total body store. Dosage must be adjusted to the individual needs of each patient but is typically in the range of 20 mEq per day for the prevention of hypokalemia to 40-100 mEq or more per day for the treatment of potassium depletion. Large numbers of tablets should be given in divided doses.

**Note:** Slow-K slow-release tablets must be swallowed whole and never crushed, chewed, or sucked.

#### HOW SUPPLIED

Tablets—600 mg of potassium chloride (equivalent to 8 mEq) round, buff colored, sugar-coated (imprinted Slow-K).

Bottles of 100 NDC 0083-0165-30

Bottles of 1000 NDC 0083-0165-40

Consumer Pack—One Unit 12 Bottles—100 tablets each NDC 0083-0165-65

Accu-Pak® Unit Dose (Blister pack) Box of 100 (strips of 10) NDC 0083-0165-32

Do not store above 86°F (30°C). Protect from moisture. Protect from light.

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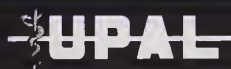
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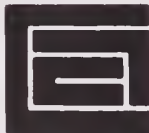
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### My Dear Son

Sometime in the near future, you will be seeing a patient who has been under my care for twenty-two years. He has had a number of medical problems and fortunately has done well, coming through all of them with no serious consequences or sequelae. I will be sending you a summary of my diagnoses and treatments as soon as he requests me to do so.

I am very pleased that you will be looking after him and taking over as his physician. I told him that he would be in excellent hands; certainly better than mine.

Because he seemed somewhat unhappy about the prospective change, I asked him why he made the decision. He told me that his employer had changed insurance plans and that every employee had to select a doctor whose name was on a list provided by the underwriter. Your name was on the list. He then asked if I would continue to be his "main" physician. He would continue to see me regularly, paying my fees out of his own pocket, as he put it. He could afford this, he said, but wanted me to refer him to you "for the real expensive things like my annual stress tests and those arteriograms and my open heart surgery if I ever need it again. I could never afford those things unless my insurance paid for them."

I assured my patient that I would be happy to continue as his physician, referring him to you upon his request and for a specific purpose.

At the time, and even now, I wonder about the ethics of what I agreed to do. If ethical, was my agreement fair to you?

I clearly remember this patient's first visit to my office almost a generation ago. He and his wife, a Registered Nurse, had moved here as newlyweds from New York. The successful results achieved in managing a previously misdiagnosed and potentially serious health problem his wife had was, he said, the main reason he selected me as his physician.

"We were referred to you by the Director of Nursing at the hospital where my wife worked," he said, "and we'll be grateful to her as long as we live.

"We both have confidence in you, and even our children always want to know what you think about the medical problems they have occasionally. Neither my wife nor I would ever take any medical advice without checking with you first."

Twenty-two years ago I guess most patients selected a physician because they had faith in a particular one, or they trusted someone who had faith in one.

Nowadays, things are different and you never know exactly why a patient came to see you in the first place. Was it because he had confidence in you? Was it because of your advertising? Was it because you were cheaper? Or was it because your name was on a list?

I think this patient is very fortunate, and someday he will realize it. You will earn his confidence, and he will respect you as much as I do.

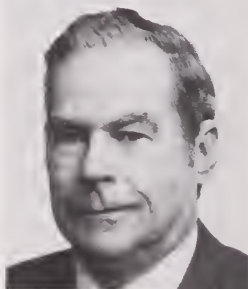
Love, Dad.

—MRJ



## PRESIDENT'S PAGE

From the time of Hippocrates, the physician has dispensed drugs on some occasions. Within the lifetime of still-living patients, physicians have had to grow foxglove in their kitchen gardens in order to prepare the potion their cardiac patients needed. But today, physician dispensing has become controversial, and Congress debates whether physicians should ever dispense drugs. The nation's pharmacists are pushing hard for a prohibition act. Why have medicine and pharmacy come to conflict over a traditional medical service?



In the ebb and flow of human commerce, it has come to pass that the neighborhood pharmacy — one of the linchpins of medical care — is now under siege and is threatened with extinction. The stridency of the present debate comes from the pharmacist's perception of a survival struggle as he seeks to improve the cash flow.

Many factors have combined to give a sense of threat to the neighborhood pharmacist. The large discount chain stores have placed pharmacies nearby, with inventories and prices that are determined elsewhere. Distant mail-order pharmacies skim off the big, chronic-use prescriptions through focused advertisement campaigns. Government agencies and insurance companies extort cheap drug substitutions, ignoring the disturbing fact that the nation's pharmacies now contain many examples of junk generics that no one can certify for therapeutic equivalence. And while inflation rolls merrily along, Congress insists that medical care be rendered at last year's prices.

Some pharmacists have responded to these forces by becoming increasingly aggressive in the patient management area. Generic substitution has become widespread. Authority for the pharmacist to prescribe treatments has been legally broadened in

many jurisdictions. The American Pharmaceutical Association is now seeking "therapeutic interchange" for the pharmacist. Federal legislation is sought that would severely limit the physician dispensing drugs and medications.

Historically, the physician has personally dispensed drugs from necessity, and usually abandoned the practice when an adequate pharmacy was available. The majority of physicians have followed the ethical principle that the benefit of the patient must be the major consideration in the decision to dispense drugs personally. To most physicians, the profit from drug sales are subordinate to the considerations of availability of consistent, pure, high quality drugs.

In frontier days, and in thinly populated areas today, these quality and availability problems lead physicians to dispense drugs. Proper service to the patient required it then, and in some circumstances, requires it now. Strangely enough, the net effect of current commercial and governmental forces on the practice of pharmacy has again brought to the surface the problem of low quality drugs and improper substitutions that plagued frontier medical care three generations ago.

The physician has a duty to his patient to oversee the quality of the services rendered to the patient by those ancillary practitioners who are a part of the healthcare team. In some circumstances, the physician personally performs the service to ensure that it is properly done. The obligation to assure quality pharmacy services is similar, and the physician has the right and even the duty to assure his patients a stable supply of nonsubstituted drugs, even if he has to dispense them himself.

The Oklahoma State Medical Association should defend the right of the physician to dispense drugs as a part of the license to practice medicine.

*Ray V. McIntyre, M.D.*

# Acute Vasospasm Associated with Anorexiant Use

Insung Kim, MD; Thomas L. Whitsett, MD

*A 39-year-old previously healthy woman experienced diffuse peripheral arterial spasm following short-term use of phentermine and phendimetrazine that she obtained from a diet clinic for anorexic purposes. The vasospasm responded to an oral calcium channel blocker.*

The use of schedule III and IV amphetamine-like analogues for the treatment of obesity appears to be increasing in Oklahoma. While both patients and physicians are familiar with the problems associated with amphetamine use, there is very little published concerning the so-called nonamphetamine anorexiants. They are indirect-acting sympathomimetic amines that affect the satiety center in the hypothalamic and limbic regions. Secondary action includes central nervous system (CNS) stimulation and blood pressure elevation. While CNS, cardiovascular, and gastrointestinal problems are well known with overdosage of this class of agents, complications arising from therapeutic dosages of these drugs when used in combination have not been described. A patient recently presented to our hospital with diffuse vascular spasm after three days' use of phentermine and phendimetrazine prescribed for her by a physician in a diet clinic.

Direct correspondence to Insung Kim, MD, Veterans Administration Medical Center, Medical Service (111), 921 Northeast 13th Street, Oklahoma City, OK 73104.

## REPORT OF A CASE

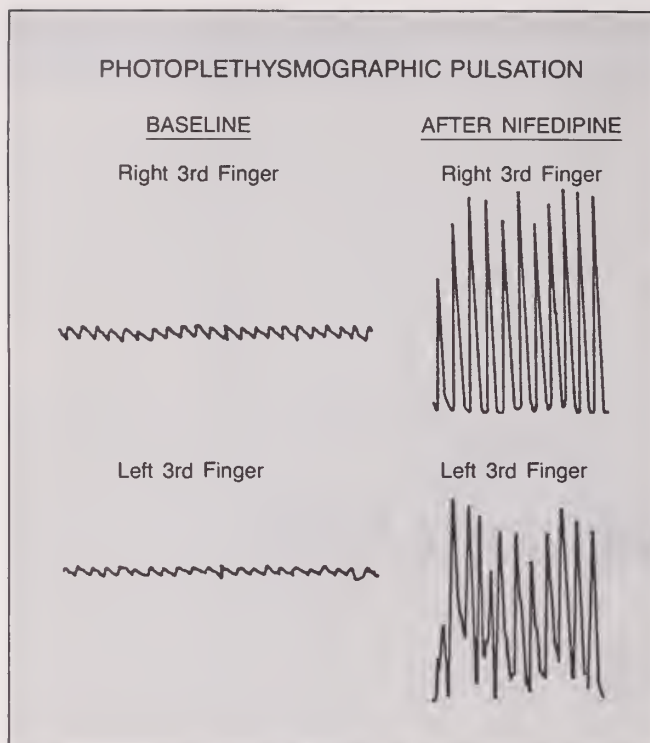
A 39-year-old white woman presented to our hospital at approximately 1530 hours, with acute onset of severe left arm pain, accompanied by coldness and cyanosis of the extremity.

Previously she had been in good health, with no history of cigarette smoking or cold-induced vasospasm. She considered herself about ten pounds over her ideal body weight and the week prior to this admission had visited a weight reduction clinic. There, the physician had prescribed phentermine 15 mg daily, after breakfast; phendimetrazine 35 mg daily, late afternoon; and "thyroid" of unknown amount (unlabeled) daily, with breakfast.

She had been on this regimen for three days prior to the onset of her symptoms. On the day of admission, she had taken her phentermine and thyroid as prescribed.

Her only other medication included Premarin® 1.25 mg daily, which she had been taking since undergoing a total abdominal hysterectomy 14 years earlier. There was no other significant medical history.

Physical examination on admission revealed the patient to be in acute distress, complaining of left hand coldness and pain. Blood pressure was 120/84 mmHg in the left brachial and 120/80 mmHg in the



**Figure.** Photoplethysmographic pulsation of the cutaneous microvascular flow in the right and left third fingers before and 30 minutes after nifedipine 10 mg po.

right brachial arteries. Heart rate was 92/min and regular.

The patient's hands and feet were cold, but only the left hand was blue, demonstrating poor capillary refilling. The left radial pulse was 1+/4+ and the right 2+/4+. The femoral, posterior tibial, and dorsalis pedis pulses were 2+/4+ bilaterally. The remainder of the physical findings were unremarkable.

The patient was immediately taken to the noninvasive vascular laboratory for assessment of the nature and severity of the vascular insufficiency. Systolic pressure recorded by Doppler was 110 mmHg in both the right and left brachial and the left radial arteries. Photoplethysmographic (PPG) determinations were obtained from the third finger of each hand. (This technique reflects cutaneous microvascular flow.) There was a marked depression of pulsatile flow in both hands, with the left being worse than the right (Fig).

At this point the patient was complaining of painful sensations in the right hand similar to those initially present in the left. From the history of amphetamine-like drug ingestion, the physical findings of an arm and hand that were cold and cyanotic with a weak pulse and poor capillary refill, and the vascular laboratory findings of normal

arterial pressures in the wrists with a markedly attenuated cutaneous microvascular flow in the fingers, it was concluded that the patient was experiencing intense vasospasm involving at least the upper extremities. No other vascular beds were assessed. Nifedipine (Procardia®) 10 mg was administered orally. Within approximately 15 minutes the fingers were less cool. At 30 minutes they were warm, and the PPG pulsations were bounding. There was no recurrence of vasospasm.

The patient was advised not to resume taking the anorexiant, and she experienced no subsequent discomfort. She was reevaluated in the vascular laboratory six months later. The results of all studies were completely normal, including arterial pressures in the wrists, PPG finger pulsations, and finger rewarming time following cold immersion of the hands. The latter is a test for the propensity to develop vasospasm.

Evaluation of the patient's thyroid function status two months after cessation of exogenous thyroid administration revealed the patient to be euthyroid.

## DISCUSSION

The central nervous system stimulant effects of amphetamines are sometimes helpful in the management of narcolepsy, hyperkinesia, and other behavioral problems of children. However, because of the great potential for abuse and overdose of amphetamines, any possible therapeutic role for these agents in the treatment of obesity has been questionable. The reclassification of the amphetamines as Class II scheduled drugs has resulted in the increasing popularity of the amphetamine-like analogues which are in the Class III and IV schedules as anorexic agents.

The appetite suppressant effect of amphetamine was first discovered in 1938 by Bahnsen<sup>1</sup> in patients who, while receiving amphetamines for treatment of depression and narcolepsy, began to lose weight. The appetite suppressant mechanism of these agents is not completely understood. It is believed that the biochemical effects of amphetamines and their analogues follow their binding to specific receptors in the central nervous system. These receptors bind all the appetite-suppressing agents, and the differences in the binding affinities are thought to determine their anorexic potency.<sup>2</sup>

After binding occurs, there is stimulation of the release of catecholamine from the presynaptic neurons, and inhibition of their reuptake. The presence



**Table. Brand Names of Some  
Commonly Used Appetite Suppressants**

<b>Phentermine</b>	Bontril PDM
Adipex-P	Bontril Slow Release
Dapex	Di-Ap-Trol
Fastin	Dyrexan-OD
Ionomin	Hyrex
Obe-Nix	Melfiat
Obephen	Metra
Obermine	Obalan
Obestin	Obeval
Oby-Trim	Phenzine
Parmine	Plegine
Phentrol	Prelu-2
Span R/D	Preludin
Teramine	Slyn-LL
Tora	Statobex
Unifast	Statobex-G
Wilpower	Trimcaps
	Trimstat
<b>Phendimetrazine</b>	Trimtabs
Adipost	Wehless
Adphen	Weightrol
Anorex	X-Trozone
Bacarate	X-Trozone LA

of freshly synthesized and readily available catecholamines results in alteration of chemical control of nerve impulse transmission leading to the stimulation of the appetite control center located in the rostral and middle hypothalamus, with resultant anorexiant effect. Neurotransmitters other than norepinephrine may also be facilitators of amphetamine effects. Complete blockage of norepinephrine synthesis and specific blockage of dopamine receptors have been demonstrated to negate the anorexiant effect of amphetamines.<sup>3</sup>

Phendimetrazine and phentermine are Class III and IV scheduled drugs, respectively. (See Table for commonly used brands.) They are well absorbed from the gastrointestinal tract as well as from the buccal mucosa. The duration of action of phendimetrazine is four hours and that of phentermine is 4 to 14 hours. Metabolism of these two agents occurs primarily in the liver. Since the pKa of these appetite suppressants is greater than 8.5, excretion of the unchanged form is generally increased when the urine is acidic.

We have reviewed the Federal Drug Administration (FDA) computerized data base<sup>4</sup> of adverse reactions from phentermine or phendimetrazine reported by health professionals. The first adverse reaction from either drug was reported in 1976. The most recent was in January 1987. The drugs are implicated in a wide variety of clinical presentations, including death, seizures, syncope, and cerebral infarction. Minor problems reported include nausea, vomiting,

tremor, headache, and urticaria. These suspected adverse reactions were not reported in the literature and required a payment of \$50.00 to access the data under the Freedom of Information Act.

The FDA data, however, do not provide true incidence information; they are helpful only in describing examples of adverse effects that are possible from these agents. None of these reports includes adverse reactions following concomitant use of phentermine and phendimetrazine. This may be an indication that the practice of prescribing both agents is a recent phenomenon and that the potential harm from this is just now becoming apparent.

Also, *USP Dispensing Information* does not include diffuse vascular spasm as a potential adverse effect of amphetamine analogues when used as single agents.<sup>5</sup> It is unknown whether combined use of these agents potentiates or causes additive peripheral cardiovascular effects.

Increase in peripheral vascular tone is, in part, attributed to the enhanced release of norepinephrine from the presynaptic terminals. Studies in dogs indicate that amphetamines may also increase the vascular tone by direct stimulation of the serotonin receptors located in the vessel walls.<sup>6</sup>

To our knowledge, there have been two reported cases of diffuse vascular spasm resulting from the injection of greater than therapeutic dosages of amphetamines for hallucinogenic purposes.<sup>7,8</sup> The spasm in one patient was reversed with intravenous nitroprusside, but saving the second patient required above-the-knee amputation.<sup>7,8</sup>

Our patient appears to represent the first reported case of vascular spasm following short-term concurrent oral use of prescribed dosages of two amphetamine-like analogues. Also, this is evidently the only patient thus far reported who was subsequently reevaluated by vascular studies and documented to have no evidence of predisposing susceptibility to vasospasm. The possibility that the addition of the thyroid hormone effect, in a euthyroid person, to the above combination of drugs resulted in enhanced peripheral cardiovascular stimulation cannot be ruled out. However, this would not be expected since thyroid hormone enhances tissue metabolic activity, which is known to promote vasodilation.

This patient's vasospasm responded well to oral nifedipine administered within one hour of symptom development. It is unclear what would have occurred if the condition had not been treated, or what other vascular beds might have become involved. However, the magnitude of this problem and its conceivable

serious complications discouraged us from recommending a rechallenge using the medications.

This case demonstrates one of the potential hazards resulting from the increasing number of physicians willing to prescribe combinations of amphetamine analogues for weight reduction. This patient was also given an unknown dose of thyroid despite her euthyroid status, documented by us. According to the Food and Drug Administration data on file, the typical users of anorexiant are women less than 45 years of age, in good health, and mildly overweight, with the majority being 4.5 kg or less above their ideal body weight as defined by the 1983 Metropolitan Life Insurance Company tables; they typically use these agents prior to upcoming social events such as the winter holiday season and vacations at the beach.

In a culture where appearance is a crucial element in interpersonal relationships, the desire to be slim will likely prevail, and weight reduction clinics will continue to function.

Until the results of further studies examining the toxicity of concurrent use of these sympathomimetics

become available, the prescribing of these agents and their effects deserves close monitoring in order to develop needed intelligence.

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Gerard J. Hunter, M.D.  
Kenneth A. McCoy, M.D.  
David L. Schwartz, M.D.  
Mark J. Weiss, M.D.

### Orthopedics

James L. Giffin, M.D.  
John F. Josephson, M.D.  
Tom A. Marberry, M.D.  
Arthur J. Murphy, Jr., M.D.  
Terrell Simmons, M.D.  
Jerry Sisler, M.D.

### Otolaryngology

John G. Campbell, M.D.  
David O. Menfield, M.D.  
John D. Mowry, M.D.

### Plastic Surgery

E. Bradley Garber, M.D.  
Fred R. Martin, M.D.  
Arch Miller, M.D.

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George S. Cohlma, M.D.  
Frank N. Fore, M.D.  
Billy P. Loughridge, M.D.  
**Urology**  
Harold W. Calhoun, M.D.  
John B. Forrest, M.D.  
Roger V. Haglund, M.D.  
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# **What About Mosquitoes and Saliva?**

*Or, Is the Human Immunodeficiency Virus Transmitted in Other Ways?*

**Gregory R. Istre, MD**

**D**espite substantial evidence that there are only three modes of transmission — sexual intercourse, blood exposure, and perinatally from infected mother to her unborn or newborn baby — there remain concerns among the general public about acquiring AIDS through other routes. This paper will address the scientific evidence which tries to answer three of the most commonly asked questions about other modes of transmission: can AIDS be spread (1) by mosquitoes, (2) by saliva, and (3) through casual contact (such as school or workplace)?

## **MOSQUITOES**

There are two mechanisms through which HIV theoretically could be transmitted by mosquitoes or other bloodsucking insects — biological (through infection and multiplication within the insect) and mechanical (directly through the insect's mouthparts).

Almost all insect-borne diseases which are transmissible to man, such as rickettsial infections, encephalitis viruses, malaria, and yellow fever, require replication of the organism within the insect.

Although DNA sequences of the HIV have been found in some insects from Africa, other researchers have questioned whether these may be due to cross reactions with other related viruses or nonspecific reactions. In none of these insects was there evidence of replication of HIV; in fact, attempts to infect arthropods with concentrations of HIV that are 1000 times greater than that found in human blood have uniformly been unsuccessful, as have attempts to grow

HIV in arthropod cell lines. The HIV apparently does not infect the cells of these insects.

Although it has been possible to recover HIV from bedbugs which had fed on blood containing HIV in over 100 times the concentration found in infected persons, these bugs were unable to transmit HIV to uninfected blood during interrupted feedings. The probable reason is the extremely small amount of blood on the mouthparts of these insects.

Finally, strong epidemiologic evidence indicates that insects do not transmit HIV infection. The age group with the highest rates of insect-borne diseases — school-age children — has the lowest rate of AIDS and HIV infection. This is true in Africa as well as the US. Even in Belle Glade, Florida, where there had been speculation about mosquito-borne transmission of AIDS, a community seroprevalence study showed that no young school-aged children or elderly adults were infected. In addition, if insects transmitted HIV, there would likely be cases occurring among household members who do not have risk factors; this has not occurred.

## **SALIVA**

An early report which showed that HIV could be recovered from the saliva of a person with AIDS raised concern about possible transmission through saliva. However, subsequent evidence indicated that HIV was found in saliva much less frequently than in blood. Whereas HIV was found in the blood of 56% (28 of 50) of infected persons in one study, only about 1% (1 of 83) had HIV in the saliva (and that single



individual had mouth lesions which could have exuded serum at the time of the culture). And when present, HIV is contained in smaller amounts in saliva than in blood. In addition, saliva has been found to contain substances which inhibit the growth of HIV.

Epidemiologic evidence from three groups indicates that saliva poses little or no risk of transmission: persons with parenteral or mucous membrane exposure to saliva of HIV-infected persons; dentists who practice in locations with high rates of AIDS; and household members of HIV-infected persons.

At least 125 healthcare workers have had documented exposure to saliva of HIV-infected patients through bites, open wounds, or mucous membrane exposures. None have developed HIV antibody. One report from Europe suggested that HIV transmission may have occurred from one sibling to another, possibly through a bite, but the history was not well documented, and the second sibling did not have Western Blot confirmation of the serologic result.

Two studies which tested a total of over 2500 dentists for HIV antibody found only one whose test was positive; that dentist seldom wore gloves, had numerous breaks in his skin, and had a history of several puncture wounds. It could not be determined whether blood or saliva was the mode of transmission.

Besides the two groups already discussed, the group with the most frequent potential contact with saliva from an infected person is composed of household members of persons with AIDS or HIV infection. As discussed below, this exposure poses no measurable risk.

Thus, although saliva theoretically could transmit HIV, the weight of the scientific evidence indicates that the actual risk is extremely low, if any exists. The Centers for Disease Control (CDC) has formulated guidelines to reduce more extensive exposure to saliva (ie, during resuscitation, sexual contact, and in other settings); these seem to be reasonable precautions at the current time.

## CASUAL CONTACT

If AIDS or HIV were transmitted through nonsexual person-to-person exposure, the people at greatest risk would be those who lived in the same household as an HIV-infected person. At least 11 different studies in the US and Europe have evaluated household contacts of persons with AIDS or HIV infection. Many of the infected-index cases were children who

had typical interactions with their siblings and parents — hugging, kissing, and playing together; sharing cups, plates, forks, and spoons; using the same sinks, toilets, and bathtubs. Some regularly bathed with their siblings; some even shared toothbrushes. Of over 700 household members, none have shown serologic or virologic evidence of infection (except a small number who had risk factors such as being the sexual partner of the infected person). In addition, of the first 50,000 reported cases of AIDS in the US, none were household members of an infected person (unless they also had other risk factors such as sexual contact, IV drug use, etc).

If HIV transmission does not occur in the intimate setting of the household, then the risk from the usual school and workplace setting must be nonexistent.

## SUMMARY

The weight of the scientific evidence — both laboratory and epidemiologic — indicates that there is no transmission of HIV from insects, saliva, or casual contact. Further support for this lack of transmission comes from studies of cases of AIDS outside of known risk groups. HIV is transmitted through sex, blood, and perinatal exposure, and our efforts at prevention must continue to be directed at these behaviors. □

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**News from  
the Oklahoma State  
Department of Health**

## Pregnancy Risk Assessment Monitoring System

The Centers for Disease Control (CDD) has selected Oklahoma as one of six sites to participate in a new three-year maternal survey identified as the Pregnancy Risk Assessment Monitoring System (PRAMS).

The project will collect information each month from a random sample of mothers, shortly after they deliver a child, to determine the incidence of previously unmeasured risk factors associated with poor birth outcome. The survey will ask mothers a variety of questions concerning physical, behavioral, and sociological factors which may have affected them during and after their pregnancy. Topics of particular interest include smoking, alcohol use, nutrition, prenatal care, and stress.

Information gathered from the survey will be useful in developing intervention strategies for reducing the prevalence of maternal risk factors which lead to

infant mortality, low birthweight, and other health problems in our state's children. The project marks the first time such population-based information will be available to any state, even though these factors are known to affect pregnancy outcome.

A stratified sampling approach based on birthweight distribution will be used to select approximately 170 women each month from the birth certificate registry. Annual sample sizes call for the selection of close to 500 women from each of the four birthweight stratum: very low birthweight (under 1,500 grams), low birthweight (1500–2,499 grams), normal birthweight (2,500–3,999 grams), and high birthweight (over 4,000 grams). The questionnaire will be administered by mail with an intensive follow-up effort planned.

CDC also awarded the Oklahoma State Department of Health a similar project to coincide with PRAMS, identified as the Pregnancy Nutrition Surveillance System (PNSS). While PRAMS will collect information from the general population, PNSS will concentrate on the maternal population receiving care from local health departments. Oklahoma was one of 10 sites to receive PNSS funding, and one of only three sites selected for both PRAMS and PNSS. For more information about these projects, call the Maternal and Child Health Services, 405/271-4476.



DISEASE	April 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	2	4
CAMPYLOBACTER INFECTIONS	14	35	44	45
ENCEPHALITIS, INFECTIOUS	3	4	7	6
GIARDIA INFECTIONS	7	40	44	55
GONORRHEA (Use ODH Form 228)	550	2355	3403	3863
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	20	75	48	63
HEPATITIS A	38	199	100	135
HEPATITIS B	18	64	73	66
HEPATITIS, NON-A NON-B	8	16	10	16
HEPATITIS UNSPECIFIED	4	13	11	35
MEASLES (RUBEOLA)	0	8	0	1
MENINGITIS, ASEPTIC	5	11	14	14
MENINGITIS, BACTERIAL				
(non-meningococcal,				
non H. Influenzae)	2	7	11	21
MENINGOCOCCAL INFECTIONS	2	11	9	15
PERTUSSIS	2	24	27	45
RABIES (Animal)	9	14	7	30
ROCKY MOUNTAIN				
SPOTTED FEVER	0	1	4	4
RUBELLA	0	1	0	0
SALMONELLA INFECTIONS	24	72	67	93
SHIGELLA INFECTIONS	9	37	66	51
SYPHILIS (Use ODH Form 228)	8	51	52	60
TETANUS	0	0	0	0
TUBERCULOSIS	21	66	70	72
TULAREMIA	1	2	3	2
TYPHOID FEVER	0	0	1	1

Diseases of Low Frequency	Total to Date This Year
ACQUIRED	
IMMUNE	
DEFICIENCY	
SYNDROME	44
BRUCELLOSIS	0
LEGIONNAIRES	
DISEASE	4
MALARIA	5
REYE	
SYNDROME	0
TOXIC SHOCK	
SYNDROME	2

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*Also AMA delegates, PLICO board, Auxiliary*

## OSMA delegates at Shangri-La elect officers

President Ray V. McIntyre, MD, a Kingfisher family physician, heads the slate of 1988-89 officers for the Oklahoma State Medical Association.

Also elected at the association's Annual Meeting, held May 5-7 at Shangri-La Resort, Afton, were the following: John R. Alexander, MD, Tulsa, president-elect; Perry A. Lambird, MD, Oklahoma City, vice-president; Jerry L. Puls, MD, Tulsa, chairman, Board of Trustees; and Sara R. DePersio, MD, Oklahoma City, vice-chairman, Board of Trustees.


James D. Funnell, MD, Oklahoma City, continues as secretary-treasurer, while Larry L. Long, MD, Oklahoma City, was again named Speaker of the House of Delegates. Robert G. Perryman, MD, Tulsa, will repeat as vice-speaker.

Re-elected to their posts as AMA delegates were M. Joe Crosthwait, MD, Midwest City; Perry A. Lambird, MD; and Floyd F. Miller, MD, Tulsa. Repeating as alternate AMA delegates are John R. Alexander, MD; William O. Coleman, MD, Oklahoma City; and John A. McIntyre, MD, Enid.

Joe B. Hester, MD, Muskogee, became the newest member of the PLICO Board of Directors. He joins OSMA Executive Director David Bickham, Edmond; William O. Coleman, MD; James B. Eskridge III, MD, Oklahoma City; Eugene G. Feild, MD, Tulsa; and David M. Selby, MD, Enid, who were elected to additional three-year terms.

The other members of the PLICO board are John R. Alexander, MD; C. Alton Brown, MD, Oklahoma City; Ed L. Calhoon, MD, Beaver; Billy Dale Dotter, MD, Okeene; Billy T. Goetzinger, MD, Oklahoma City; C.S. Lewis, Jr., MD, Tulsa; John A. McIntyre, MD; Ray V. McIntyre, MD; Floyd F. Miller, MD; Tim K. Smalley, MD, Stillwater; and Kenneth W. Whittington, MD, Bethany.

The 1988-89 officers of the OSMA Auxiliary are President Jan Storms (Bruce), Chickasha; President-Elect Maureen Bynum (Chester), Norman; First

Vice-President Ginny Morris (William), Chickasha; Second Vice-President Susan Paddock (Gary), Ada; Recording Secretary Nora White (Robert S.), Sapulpa; Treasurer Ellen Metz (Allan), Oklahoma City; and Donna Hromas (Richard L.), Enid. 


*Casting a long shadow*

## Oklahoma Hall of Fame plans induction of Ed Calhoon, MD

Ed L. Calhoon, MD, Beaver native and general practitioner, has been named to the Oklahoma Hall of Fame. He and seven other honorees, chosen recently by the Oklahoma Heritage Association, will be inducted at a special ceremony on November 12, 1988, at the Myriad Convention Center in Oklahoma City.

Dr Calhoon, well known by his colleagues in Oklahoma, has become nationally recognized as an outstanding physician and surgeon. Educated at the University of Oklahoma, he returned to his hometown to serve the people of the Panhandle.

He has received numerous awards and honors, including the A.H. Robins Community Service Award in 1980, given annually to the outstanding Oklahoma medical practitioner, and the Oklahoma Physician of the Year Award in 1984, given by the University of Oklahoma Health Sciences Center.

Nationally, he has served in numerous capacities with the American Medical Association, including its Council on Rural Health and Council on Legislation. He also has served on the National Advisory Council, Health Care Systems, of the National Institutes of Health. Since 1982 he has served, by Presidential appointment, on the National Cancer Advisory Board. 

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## OSMA Board of Trustees names sixteen new Life Members

The OSMA Board of Trustees, meeting May 5 at Shangri-La Resort near Afton, approved sixteen Life Memberships.

Applications for the following Oklahoma City physicians were approved: John D. Ingle, MD; LeRoy Long, MD; William D. Maril, MD; and Jay T. Shurley, MD.

Approved from Tulsa were Milton L. Berg, MD;

Joseph K. Farish, MD; and James C. Walker, MD.

Also awarded Life Memberships were P.D. Casper, MD, Del City; William A. Miller, MD, Homosassa, Fla (submitted by Oklahoma County Medical Society); Gerald G. Robertson, MD, Edmond; and Harold G. Sleeper, MD, Midwest City.

Additional Life Memberships were those of Jack O. Alexander, MD, Ponca City; George B. Gathers, Jr., MD, Stillwater; George R. Kennedy, MD, Virginia Beach, Va (submitted by Washington-Nowata County Medical Society); Alexander Shadid, Sr., MD, Elk City; and Rhonald A. Whiteneck, MD, Enid.

Any member in good standing with the OSMA is eligible for Life Membership if one or more of the following qualifications is met: (a) retired from the active practice of medicine due to ill health or age; (b) engaged in the active practice of medicine for fifty years or more; (c) attained the age of seventy years. □

### IN MEMORIAM

#### 1987

John Wesley Williams, MD	May 16
John Jerome Coyle, MD	May 21
J. C. Rogers, MD	May 22
Scott Allen Morris, MD	May 24
Gladys Christine Smith, MD	May 27
John Ronald Watson, MD	June 14
Thomas Arthur Hosty, MD	June 17
Dan Cross Galloway, MD	July 12
Donald Owen Walker, MD	July 21
Cecil Reid Reinstein, MD	August 14
Alwin Marshal Clarkson, MD	September 1
Rex Elmer Kenyon, MD	September 16
Charles P. Bondurant, Jr., MD	October 12
James C. Smith, Jr., MD	December 30

#### 1988

Charles Stewart Cunningham, MD	January 1
Charles Wallace Coyner, MD	January 4
Glen Franklin Wade, MD	January 12
Newman Sanford Matthews, MD	January 12
Frank Cornwell Lattimore, MD	January 30
Leo Lowbeer, MD	February 3
Joseph Norman Kramer, MD	February 16
Eugene Richard Flock, MD	February 17
Jay P. Irby, MD	February 25
James William Finch, MD	March 4
John Junior Donnell, MD	March 7
Tony Willard Pratt, MD	April 21
James Park Dewar, Jr., MD	May 5
Hugh Albert Stout, MD	May 7
James Robert Carroll, MD	May 28

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## DEATHS

**James Robert Carroll, MD**  
**1932 - 1988**

Tulsa ophthalmologist James R. Carroll, MD, died May 28, 1988. Dr Carroll, a 1959 graduate of the University of Oklahoma School of Medicine, joined the McAlester Clinic in 1963. He left there in 1968 to establish a practice at the Tulsa Eye Clinic. Dr Carroll was an associate clinical professor at OU Tulsa Medical College and a member and past president of the Tulsa Ophthalmological Society.

**James Park Dewar, Jr., MD**  
**1913 - 1988**

OSMA Life Member James P. Dewar, MD, a native of Troy, NY, died May 5, 1988, in Carefree, Ariz. A 1939 graduate of McGill University Faculty of Medicine in Montreal, Quebec, Dr Dewar served in the US Army from 1941 through 1946. Several years later, he moved to Oklahoma City, where he became director of laboratories at University Hospital and associate professor of pathology at the University of Oklahoma School of Medicine.

**Newman Sanford Matthews, MD**  
**1904 - 1988**

OSMA Life Member N. Sanford Matthews, MD, Oklahoma City, died January 12, 1988. A native of Clarendon, Ark, Dr Matthews earned his medical degree at the University of Oklahoma School of Medicine in 1937; he specialized in gastroenterology. Dr Matthews was on active duty with the US Army Medical Corps in England during World War II.

**Hugh Albert Stout, MD**  
**1909 - 1988**

Hugh A. Stout, MD, an Oklahoma City internist, died May 7, 1988. Dr Stout, a Life Member of the OSMA, was graduated from the University of Oklahoma School of Medicine in 1937. The Shattuck native served with the US Army Medical Corps in Africa, Italy, and the Philippines from 1943 to 1946, attaining the rank of major. He became assistant professor of pathology at the University of Oklahoma in 1954 and was board certified in both internal medicine and pathology.

## REACTION TIME

### MRJ's November editorial sparks spring controversy in Tulsa

To M. Joe Crosthwait, MD, President, Oklahoma State Medical Association: In response to the enclosed letter from Dr. George Prothro, and after considerable discussion, the Board of Directors of Tulsa County Medical Society strongly objects to the editorial by Dr. Mark R. Johnson in the March, 1988 issue of *Private Practice* magazine. This same editorial appeared in the November, 1987, issue of the *Journal of the Oklahoma State Medical Association*.

Dr. Prothro's letter is so well written and to the point that, with his permission, I offer it to you as an excellent summary of our discussion. We will also print Dr. Prothro's letter in the next issue of *Tulsa Medicine* [June 1988].

Of primary concern to the TCMS Board is the fact that, while OSMA is attempting to convince the physicians of Oklahoma to participate in the VIP program, the "Editor-in-Chief" of the *Journal* is suggesting that physicians who accept Medicare assignment are less competent than physicians who do not accept these patients. At the very least, we all need to be saying the same thing. It would be of great benefit if it were also factual.

I would be pleased to visit with you, if you have any questions about this.

— William E. Harrison, Jr., MD  
President  
Tulsa County Medical Society

Please, Dr Harrison, Dr Crosthwait shares no responsibility for my editorials. I would be pleased to visit with you, especially if we could re-read my editorial.  
—Ed.

To William E. Harrison, Jr., MD, President, Tulsa County Medical Society: I wish to express my opposition to the article "Lessons in Deception" by Mark R. Johnson, MD. This was originally printed in the *Journal of the Oklahoma State Medical Association* (Nov. 1987) and has now been reprinted in the March 1988 issue of *Private Practice*.

I quote the first "Lesson" which Dr. Johnson wishes us to learn: "Patients who need or want a physician who will spend time with them should avoid those who accept Medicare assignment." In essence Dr. Johnson is warning those patients who have physicians accepting Medicare assignment that they are being served by physicians who do not provide the quality of care they deserve.

This is an affront, a personal insult, to the many

physicians throughout Oklahoma who for years have dedicated their lives and professional ability to the philosophy that "care" is the most important ingredient of medical care. These are the physicians who have accepted Medicare assignment on patients of limited means, and in some cases on all Medicare recipients, in the greatest tradition of our profession.

Dr. Johnson's conclusion that physicians who accept Medicare assignment are physicians who should be avoided is certainly in conflict with the recent adoption, and endorsement, by the Oklahoma State Medical Association of the V.I.P. plan in which physicians volunteer to accept assignment on all Medicare patients meeting certain income guidelines. Dr. Johnson warns patients to avoid the over 300 Tulsa County physicians already participating in this plan. Above all, such a false and misleading statement certainly will not improve our image among politicians, senior citizen groups and our patients.

I urge the Board of Directors of the Tulsa County Medical Society to take appropriate action in strongly protesting the publication of this opinion of Dr. Johnson. I can only support the title, for the article itself is indeed a "Lesson in Deception."

— George W. Prothro, MD  
Tulsa

It's possible that Dr Prothro's impression of what I said is not what I said. If Medicare allowances adequately compensated physicians for services they rendered Medicare beneficiaries, why would our VIP program be necessary? — Ed.

### Plagued by disease promoters?

To the Editor: I just read your recent editorial, "Diseases, Inc." [*Journal*, April 1988] and was somewhat dismayed that you did not go far enough in your effort to express the need for one national, perhaps even multi-national, organization to meet all past, present and future maladies. I submit the newly formed Mutual Federation for Elimination of Disease and Universal Plagues. Rest assured that in a short while of this entity's existence, you can exclaim "MFEDUP" with this one too.

Keep after it!

— Lyle Kelsey  
Oklahoma City



### Breast Lumps and Cancer — A Brief Study in Loss Prevention

William O. Coleman, MD, Oklahoma City

The management of breast lumps remains a frequent concern of all physicians. The overall incidence of carcinoma of the breast in women now approaches one out of every 11 (9%). In men, benign breast tumors, especially gynecomastia are the most common cause for breast lumps. The most common causes for lumps in the female breast are the benign lesions such as fibrocystic disease and fibroadenomas. Fibrocystic disease may well be present in 100 percent of women past 50 years of age and is very common in younger women. While all women are at risk for the development of breast cancer, some are at greater risk. Some of these increased risk factors are as follows: (1) Age — most cancers occur in women older than 25; eighty percent are said to occur in women older than 40 years! (2) A family history of breast cancer, especially those in which the mother and sister both had breast cancer; (3) A previous personal history of breast cancer.

Disregarding the present and past controversy over methods of treatment for breast cancer, *early detection of breast cancer offers the best opportunity for cure.*

#### MANAGEMENT OF THE PATIENT WITH A BREAST LUMP

The sudden realization that a lump exists in the breast is a devastating psychological event for most women. The attending physician *must* not succumb to the temptation to comfort the patient by suggesting the lump is probably benign and sending her home to wait for another period or to give the lump a "chance to go away on its own." Instead, one should proceed to attempt a diagnosis as quickly as possible. Cancer of the breast is still the most common cancer in women.

#### BREAST EXAMINATION

Statistically, patients themselves discover most breast cancers (lumps). It has also been noted in trials where physicians were asked to examine silicone models of breasts containing various sizes of "lumps," many of the lumps were missed by the physician examiner. The physician needs to become proficient in and perform a breast examination

during every woman's physical examination. A suggested procedure for examination is as follows:

Good lighting is essential. The patient should be disrobed and seated facing the examiner. The patient is visually examined with arms at her sides, then with arms raised overhead. The breasts are compared for differences in contour, retracted or elevated areas, nipple abnormalities such as discharge or eczema, skin dimpling or edema, and determine if the present-ing "lump" is associated with any of the above findings.

Systematic palpation of the entire breast should then be done with the patient sitting and again with her in the supine position. In many instances it will be found that there are actually numerous lumps present instead of the one noted by the patient. The presence of multiple lumps, especially if accompanied by pain and tenderness, usually indicates chronic fibrocystic mastitis. Single solitary lumps are usually due to tumors but frequently are cysts.

#### MAMMOGRAPHY

In spite of the fact that mammography is the most effective diagnostic technique to detect non-palpable or minimal breast cancer, it is surprising how many physicians still do not utilize it or feel it to be misleading. Mammography should be utilized in patients over the age of 25 who have a breast lump. However, a clinically suspicious breast lesion should be excised even if the mammogram is negative. The diagnosis of breast cancer is greatly improved when mammography and physical examination are combined and mammography is still the most effective way to demonstrate the early, non-palpable breast cancer.

#### EVALUATION OF THE LUMP

Since 80 percent of breast lesions are not cancerous, women (and physicians) should *NOT* avoid the evaluation of all lesions because of the possibility of finding cancer! It is appropriate in almost all cases to determine if the lump is cystic or solid by aspiration using a fine or small gauge needle with syringe. If fluid is obtained and the lump is no longer palpable after aspiration, open surgical biopsy is usually not recommended.

If the lump is solid, fine needle aspiration-biopsy using a "Paps" fixation technique of the aspirated



material on a slide is appropriate especially on solid lesions that are irregular and non-mobile or that are otherwise suspicious for cancer. A "Paps" smear of the fluid aspirated from cysts is rarely of value. Local anesthesia is helpful especially if a needle biopsy such as the "Tru-Cut" is utilized.

Removal of the tumor or open biopsy is still recommended for all solid lumps even if the needle biopsy or aspiration biopsy is negative. A confirmatory open or needle biopsy should be done on *all* fine needle aspiration biopsies that are positive (for cancer) before definitive cancer treatment.

Evaluation of the lump is reassuring to those women with benign lesions and permits early treatment of those with cancer.

#### SCREENING

The value of breast self-examination, regular physical examination, and mammography is well documented, yet many physicians do not have a consistent policy for their patients, both symptomatic and asymptomatic. Aggressive screening of asymptomatic women should be done to detect early occult

disease, because these are the women we can help the most with treatment.

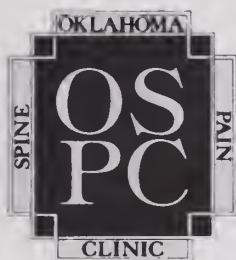
I personally feel that patients with symptomatic breast disease (lumps) should be examined at least every six months and sometimes every four months. It is very important that all patients who have mammograms see and be examined by a physician.



#### REFERENCES

1. Council on Scientific Affairs, AMA: Early detection of breast cancer, *JAMA*, Dec. 7, 1984 - Vol. 252, No. 21.
2. Peters, George: Screening for breast cancer, what, when and how; *The Cancer Bulletin*, Vol. 38, No. 4, 1986.

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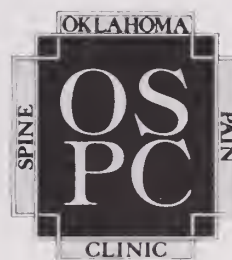
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## BOOK SHOP

**Tropical Medicine and Parasitology: Classic Investigations.** Vol 1. Edited by B.H. Kean, Kenneth E. Mott, and Adair J. Russell. Ithaca, New York and London: Cornell University Press, 1985, pp 284, illus, price not given.

This book is a collection of writings dealing with scientific discoveries by some 200 of the workers in tropical medicine in medical parasitology. As stated in the preface, the history of medical parasitology extends from 1650 to 1950. During this period the etiologic agent, the host-parasite relationships, chronic manifestations of disease, pathology, and the complex life cycles were elucidated.

The book, which is edited by three well-known workers in tropical medicine and parasitology, consists of reproductions of classic articles in tropical medicine and parasitology from the original journals. In most instances, the entire article is included but, when the original was too lengthy, segments were chosen and deletions indicated. Each article provides the title, citation of the journal in which it originally appeared, and a brief biographical abstract of the primary author.

The text is divided into three major sections. The first, "Scientific Beginnings," provides reproductions of ten communications representing the basic sciences. This section serves as a prologue or introduction to the systematic portion of the book. It begins with letters from van Leeuwenhoek, in which he describes the parasite and the syndrome of giardiasis in himself in the middle of the seventeenth century. These are followed by Redi's articles on the concept of spontaneous generation. The modern era is introduced by the important work of Theobald Smith and Kilborne on Texas tick fever.

Section II is entitled "Protozoa — Protozoal Infections" and begins with communications dealing with malaria. It describes chronologically the development of knowledge of malaria from the 1717 recommendation that swamps be drained through the understanding of the life cycle and identification of the three species responsible for the disease. Among the most astonishing observations are those of Laveran, who identified the malaria parasites and made his clinical correlations without the use of stains. In the same pattern are reproduced other classic contributions from the literature dealing with such protozoal infections as amebiasis, giardiasis, trypanosomiasis, and toxoplasmosis.

Section III is entitled "Helminths — Helminthic Infections." Here some 23 different helminthic infections are covered, ranging from hookworm to



echinococcosis. Several important articles concerning this particular disease are included.

The reader will find this an interesting trip through medical history. The quality of some of the original illustrations is impressive, as well as the clarity of many of the original descriptions of causative agents and their diseases. This monograph constitutes an important historical reference. Although many leaders in the field are mentioned, one has to be particularly impressed with the contributions of Patrick Manson, who made fundamental contributions to at least four different disease processes.

—Harris D. Riley, Jr., MD  
Oklahoma City

**Clinical Electrocardiography: A Primary Care Approach.** By Ken Grauer, MD, and R. Whitney Curry Jr., MD. Oradell, New Jersey; Medical Economics Co., Inc., 1987. Pp 540, illus, price not given.

Drs Grauer and Curry have done a commendable job in writing this book aimed at general and family practitioners. Their knowledge of the subject matter and the style in which it is presented make for interesting, educational, and even enjoyable reading.

The format of the book includes (1) discussion of a subject, (2) problems with illustrations following the discussion, (3) immediate answers with a concise explanation. This format lends itself to rapid acquisition of a concept with immediate reinforcement, a technique lacking in many standard texts. The drawings and figures are well done and for the most part accurate.

Part I discusses the basic principles underlying electrocardiography. Although somewhat unorthodox in sequence of presentation (description of the components of the normal electrocardiogram (EKG) in Chapter I and discussion of Einthoven's triangle in Chapter III), it is concise, with enough theory to promote understanding while avoiding confusion.

Part II discusses clinical applications and includes good sections on normal variations, nonspecific ST-T wave abnormalities, drug and metabolic effects, and changes observed in central nervous system dysfunction. There is an extensive chapter on myocardial ischemia and infarction as well as chapters on inter-ventricular conduction abnormalities and chamber enlargement.

Part III is an entire section of exercises with answers and discussion. Topics addressed include

metabolic disturbances; atypical EKGs in healthy, asymptomatic subjects; EKGs in patients with cardiomegaly on chest x-ray; tall R wave in lead V1; EKGs in patients with chest pain; and pseudoinfarction patterns.

The appendix includes a handy reference guide that represents the high points of the book in small, concise tables and figures.

If there is a fault in the book, it would be in the lack of material concerning the differences between adult and pediatric/infant EKGs and arrhythmias. Although being a pediatric cardiologist increased my awareness of this deficit, I do believe it is real and should have been covered in a bit more detail.

My overall rating of this book for the general practitioner/family practitioner is good to excellent, and I strongly recommend it to those interested in honing their skills in electrocardiography.

—Kent E. Ward, MD  
Oklahoma City



## MISCELLANEOUS ADVERTISEMENTS

Miscellaneous advertising is available at the rate of \$11 per month per vertical inch or any portion thereof (ie, 1-7 lines is \$11, 8-14 lines is \$22, etc). Rates are not prorated for fractions of an inch. One inch of space contains 7 lines of copy averaging 55 characters each. The first line of the ad will automatically be set in all capital letters and averages only 38 characters. Count every letter, space, and punctuation mark as a character.

Box numbers will be assigned upon request at no additional charge. When requesting a box number, the last line of the ad must read: Reply JOURNAL BOX 00, c/o OSMA. This will add 32 characters and must be included.

Typewritten copy is preferred. Otherwise, print very legibly in ink. Ads will not be accepted on the telephone. Be sure to indicate how many times the ad is to run, and for the JOURNAL's records, please include a name, address, and telephone number where you can be reached if necessary. Ads must be received by the first of the month preceding the month of publication.

Enclose payment with your ad and mail to: OSMA JOURNAL, 601 Northwest Expressway, Oklahoma City, OK 73118. OSMA members and state agencies will be invoiced upon request.

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(continued on p 412)



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PARTNERSHIP OPPORTUNITY — MULTI-SPECIALTY Clinic. Family Practice Physician. Ground floor opportunity for a Family Practice Physician desiring to be a part of the development of a Multi-Specialty Clinic, striving to bring quality medical care to a growing community. FCICC offers a growth opportunity plus substantial patient base with income guarantee. For immediate consideration please submit CV with qualifications to: First Choice Immediate Care Clinic, Inc., 817 South Elm, Broken Arrow, Oklahoma 74012. 1-918-251-8288. Jane Cassel.

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FAMILY PRACTICE — SMALL TEXAS PANHANDLE town located on Interstate Highway seeks one or two FPs to assume practice of retiring physician. No purchase necessary. Service area population 10,000. OB needed. Office adjacent to 45-bed hospital. Call coverage and time off no problem. Generous incentive package. Physician Resource Network, P.O. Box 37102, Fort Worth, TX 76117, 817/595-1128.

INTERNAL MEDICINE — SMALL GROUP HAS immediate need for BC FP or general internist. Nice community of 25,000; modern hospital; many specialties represented. Many recreational/social amenities; easy access to major airport. Competitive incentive package and favorable terms of association. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

INTERNAL MEDICINE — IMMEDIATE NEED FOR BE/BC general internist for solo practice with shared call. Office on campus of regional medical center serving 150,000 in Northeast Texas and Southeast Oklahoma. Family-oriented community of 27,000 with strong, diversified economy; good schools. Competitive incentive package. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

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ORTHOPAEDIC SURGEON — NEEDED FOR ATTRACTIVE Texas community of 25,000 (trade area 75,000). Associate practice, or solo with shared call. Modern, 100-bed hospital with excellent equipment. Many specialists on staff. Competitive incentive package. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, TX 76117; 817/595-1128.

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# PROCEEDINGS

**82nd Annual Meeting  
Oklahoma State Medical Association**

**May 5-7, 1988  
Shangri-La  
Afton, Okla.**



Annual Meeting photographs by  
Susan Harrison and Mike Sulzycki

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# OSMA House of Delegates REPORT OF THE PRESIDENT

M. Joe Crosthwait, MD



It is with mixed emotions that I say "goodbye" as your President.

I thank you for the opportunity to represent you and the association this past year. I suppose all presidents leave office with the feeling that they should have and could have done more. I am certainly no exception.

This past year has been one of unpredictability and short periods of boredom punctuated with stints of somewhat intense activity. Our state office, under the direction of **David Bickham**, runs so smoothly that many times I have felt as though I was titular head of our association. I have felt that I was behind the power curve. Perhaps this is another example of "Peter's Principle."

Do you realize that this association has not had a dues increase in the past six years? I believe that is incredible testimony to the excellent management of **David Bickham**, et al.

I have had the opportunity to visit all of our councils except one. The councils work very hard to provide the services we all enjoy from our state association. I have visited several county societies at their invitation and have enjoyed these associations very much. As your president, I have served as a board member of both the

Physicians Liability Insurance Company and as ex-officio member of the Oklahoma Foundation for Peer Review.

PLICO is in good hands under the leadership of **Alton Brown** and a hard working, dedicated board of directors. We enjoy one of the lowest premiums available in this country.

We recently had a very narrow escape from the clutches of the Legislature when an attempt was made to include PLICO in the bill designed to stop insurance companies from using the discount method of accounting when determining the reserves of the company. This onerous regulation as it pertains to PLICO was almost single-handedly negotiated out by **David Bickham** and **Otie Ann Carr**. This saved every physician in Oklahoma about \$6,400 that would have been necessary to increase the reserves of the company.

Most of you know my feelings about the concept of PSROs and PROs. But I am happy that our PRO is under the direction of physicians. I have seen the board in action, and they make difficult decisions under trying conditions. I'm glad they are physicians.

During the past year, at the direction of the House of Delegates, the as-

sociation imported from Tulsa County the **VIP Program**. We have established a coalition between Medicine and the Senior Citizens of our state. Can you imagine how powerful a coalition this can be if cultivated to its maximum? The VIP Program is functioning in 32 of the counties in the state. This means that approximately 85-90% of the Medicare recipients in the state have access to this program, and it is growing all the time. I believe that it is worthy of note that the Oklahoma Legislature did not introduce legislation for mandatory assignment this year. I believe this is directly due to the formation of a statewide VIP Program. The legislators recognize that we are aware of the needy and have compassion for their plight. We encourage your further participation in the continued development of the program. In my opinion, the success of the VIP Program is the best defense

we have to prevent universal mandatory assignment in our state. If more physicians over 50 years of age would join the American Association of Retired People, this would establish a powerful force within that group. I am convinced that as long as the Medicare recipients can find physicians who will take care of them, we will continue to have more rules, regulations, and less reimbursement.

On the national scene, there is not much that is new. We have been able to fend off mandatory assignment so far, apparently in expectation of the Harvard AMA Relative Value Study. They continue to implement new rules and regulations mandated in previous alphabet soup conventions — OBRA, COBRA, and other omnibus vehicles. You will hear more later today about the RVS. But one thing I am certain of is that we must not let it divide us. There are certain aspects that seem to be headed in that direction.

One thing our association does not need is further divisiveness. We must stick together or, as the old saying goes, "We will surely hang separately."

Do not be complacent. There are people who have dedicated themselves to the control of American Medicine. They have not given up nor retreated.

Our Council on State Legislation, with **Larry Long** at its helm and the

*One thing our association does not need is further divisiveness. We must stick together or, as the old saying goes, "We will surely hang separately."*

—M. Joe Crosthwait, MD

able first lady of lobbying, **Otie Ann Carr**, doing the work at the State Capitol, has been very successful in the association's efforts in the Legislature.

I would also like to report the establishment of two very important committees: the Physician Legal Action Support Committee, which is designed to respond to physicians and their families whenever there are lawsuits or accusations that result in adverse actions against physicians; and the Physicians Rights Committee, which is to assist physician members of the OSMA who allege that certain rights and privileges have been denied them by a third party and have no convenient place to go to get these issues resolved.

And finally, to David Bickham, Ed Kelsay, Robert Baker, Mike Sulzycki, Otie Ann Carr, Lyle Kelsey, Claudia Kamas, Toni Leverett, Susan Meeks, Sandy Ruble, Judy Lake, Debbie Hinson, Shirley Burnett, Carol Dumler and Susan Harrison — these are the people who have made it seem so easy. My heartfelt "THANK YOU."

Respectfully submitted,  
M. Joe Crosthwait, MD  
President



## OSMA House of Delegates REPORT OF THE PRESIDENT-ELECT

**Ray V. McIntyre, MD**

**M**embers of the House of Delegates, I appreciate the opportunity to be here in this capacity, and I thank you. I am feeling a lot of stage fright now as I think about following the footsteps of physicians like Joe Crosthwait, Norman Dunitz and Elvin Amen. But I will give it my best, and — with the help of John Alexander and *many others* — we shall keep the association's ideals at the top.

There is a long list of problems facing the patients and the physicians of Oklahoma, and the Oklahoma State Medical Association offers a special channel through which to address these problems with the talents of the individual physician. The association is very well managed, and an excellent staff is functioning well. Together we can be a positive force on the direction medicine will take in Oklahoma. Your ideas and your input is earnestly solicited.

During the forthcoming year, tort reform should be emphasized, both by the association and by the individual physician in the community. We physicians here in Oklahoma may have been lulled into a state of complacency by the stable environment produced by our wholly-owned Physicians Liability Insurance Company. But we must remain aware that the insurance climate can — and does — change suddenly. We should think of it as if we are in the calm waters of the eye of the hurricane, and that we are always just a few knots away from very dangerous waters.

I believe the association should mount a major effort to get the Oklahoma Legislature to pass five or six important elements of tort reform during the next legislative session in 1989. This will not be easy to do. The make-up of the Oklahoma Legislature, in particular the Senate, is biased against tort reform, and we will have to become involved in the upcoming general election in order to have a reasonable hope of success.

I do think we must press on with tort reform in the State Legislature. A federal solution to the liability problem does not seem likely. A community based public education program could

be helpful but very slow to produce results. Physician education on the etiology of malpractice suits should be continued with rigor, but, at best, physician education can be expected to reduce the liability only a little. We must make our case with the Legislature and educate the lawmakers to the inequities of the present system. I hope each of you will personally talk to your state senator and representative about tort reform during the next few months.

The Oklahoma State Medical Association has had oversight and influence on a number of ongoing issues and situations; these interactions will be continued with emphasis varied by necessity. To be mentioned here are: government and insurance company intrusion into medical decisions, drug and alcohol abuse, AIDS and other dread diseases, medical education and licensure, maternal and child mortality, ancillary practitioners and quality of care problems.

Again, I ask for your help and your ideas on any and all of these association activities. United we stand.

Respectfully submitted,  
Ray V. McIntyre, MD  
President-Elect





The Opening Session of the OSMA House of Delegates meets in Salon A of the convention center.

## Minutes OSMA House of Delegates OPENING SESSION

Friday, May 6, 1988, 9:00 AM

### I. Call to Order and Invocation

The House of Delegates convened its 82nd Annual Session at the Shangri-La Conference Center in Afton, Oklahoma, on May 6, 1988. The Speaker, Larry L. Long, MD, called the meeting to order at 9:10 AM.

J. B. Eskridge III, MD, Oklahoma City, delivered the invocation.

### II. Report of the Credentials Committee

John A. Blaschke, MD, Oklahoma City, Credentials Committee Chairman, announced that a quorum was present.

### III. Introductions

Doctor Long introduced those at the head table: M. Joe Crosthwait, MD, President; Ray V. McIntyre, MD, President-Elect; Robert G. Perryman, MD, Vice-Speaker of the House; Mr. David Bickham, OSMA Executive Director; and Mrs. Susan Meeks and Mrs. Toni Leverett, Recording Secretaries.

Doctor Long then introduced and welcomed the following special guests: Ms. Nancy Guiden, AMA Medical Society Relations Officer; and OSMA Past Presidents Elvin M. Amen, MD; Ed L. Calhoon, MD; Norman L. Dunitz, MD; J. B. Eskridge III, MD; John A. McIntyre, MD; Floyd F. Miller, MD; James B. Pitts, Jr., MD; and Orange M. Welborn, MD.

Doctor Long announced that Doctor Calhoon has been accepted into the Oklahoma Hall of Fame.

Doctor Long announced that there are two Reference Committee changes: John C. Axton, MD, Oklahoma City,

is replacing Dr. Tony Puckett in Reference Committee III, and Noble L. Ballard, MD, Altus, will be added to Reference Committee II.

### IV. Approval of the Minutes of the 1987 Annual Meeting

Doctor Long noted that the minutes were published in the July issue of the *Journal*. Being that there were no objections, the Chair announced the minutes were approved as published.

### V. Presentations

Doctor Long introduced Mrs. Julie Weedn, OSMA Auxiliary President, who in turn introduced Mrs. Betty Szewczyk, AMA Auxiliary President, from Belleville, Illinois. Mrs. Weedn noted that Mrs. Szewczyk's theme for the year has been "Teach the Children." Mrs. Weedn then touched on Mrs. Szewczyk's many accomplishments while serving as AMA Auxiliary President.

Mrs. Szewczyk then spoke and stressed the critical need for teamwork between the medical associations and auxiliaries in order to strengthen their mutual efforts. Mrs. Szewczyk expressed her pleasure in Oklahoma's accomplishments in such teamwork and stressed the need for making the same strides on the county level. She then enumerated several ways in which this teamwork would make a difference: (1) solving youth health problems; (2) influencing legislation for quality care; (3) medical education; and (4) support of the medical family.

Mrs. Weedn then presented her report, and stated that the OSMA Auxiliary's theme for the year has been "Physician Partnerships — Working Together in Times of Change." Mrs. Weedn expressed her appreciation to all the doctors for their support, the Board of Trustees and the OSMA staff. She also thanked her physician partner, Dr. Robert J. Weedn, for his patience and support during her year as

Doctor Long announced that the 1988 A. H. Robins Community Service Award will go to George W. Prothro, MD, Tulsa, and the award will be presented at the August meeting of the Board of Trustees.

This year's recipient of the Donald J. Blair Friend of Medicine Award, Doctor Long announced, is Mr. James Loy of Chickasha.

W. Frank Phelps, MD, Tulsa  
Theodore W. Violett, MD, Oklahoma City  
James R. Wendelken, MD, Oklahoma City  
Robert C. Wright, MD, Stillwater  
Carol Blackwell-Imes, MD  
Oklahoma City



Shangri-La's Golden Leaf Conference Center

Auxiliary President.

Mrs. Weedn introduced Mrs. Dawn Wood, AMA-ERF Chairman, who presented the following checks to the three medical colleges in Oklahoma:

\$3,249.00 was presented to Patrick D. Lester, MD, on behalf of Oral Roberts University College of Medicine.

\$29,532.21 was presented to Donald G. Kassebaum, MD, Dean of the University of Oklahoma College of Medicine, Oklahoma City.

\$2,705.00 was presented to Edward J. Tomsovic, MD, Dean of the University of Oklahoma Tulsa Medical College, Tulsa.

Doctor Long recognized Mark R. Johnson, MD, OSMA *Journal* Editor-in-Chief, who presented the Charlotte S. Leebron Memorial Trust Award to James R. Allen, MD, Tulsa psychiatrist, for his paper "Infantile Autism Reconsidered," which was published in the May 1987 issue of the *Journal*.

## VI. Remarks of the Speaker

Doctor Long noted the appointees to the following committees to assist in the conduct of the meeting:

### *Parliamentarian*

Roger J. Reid, MD, Ardmore

### *Credentials Committee*

John A. Blaschke, MD, Oklahoma

City, Chairman

Theodore J. Brickner, Jr., MD, Tulsa

Elvin M. Amen, MD, Bartlesville

### *Tellers*

Jay A. Gregory, MD, Muskogee

F. W. Hollingsworth, MD, El Reno

John B. Nettles, MD, Tulsa

### *Sergeant-at-Arms*

Leo Meece, MD, Woodward

### *Reference Committee I*

Ross Rumph, MD, Enid, Chairman

Donald C. Karns, MD, Enid

### *Reference Committee II*

Donald R. Carter, MD, Oklahoma City, Chairman

James R. Rhymmer, MD, Clinton

Robert Dix, MD, Lawton

Jonathan D. Friend II, MD, Tulsa

Scott W. Calhoon, MD, Oklahoma City

Rebecca Goen Tisdal, MD,

Oklahoma City

Noble L. Ballard, MD, Altus

### *Reference Committee III*

Boyd O. Whitlock, MD, Tulsa, Chairman

Jon C. Axton, MD,

Oklahoma City

Stephen E. Trotter, MD, Shawnee

Gary W. Rahe, MD, Oklahoma City

Bonnie J. Ashing, MD, Tahlequah

Richard L. Hromas, MD, Enid

M. Boyd Shook, MD, Oklahoma City

Doctor Long announced the reference committees will meet directly after the Opening Session, at approxi-



mately 10:30 AM. He also referred the delegates to the late items of business accepted by the Board of Trustees for consideration by the House. He announced that Resolution 6 should be moved from Reference Committee I to III, and that Resolution 14 should be moved from Reference Committee I to II.

## VII. President's Report

Dr. M. Joe Crosthwait presented his report as outgoing President of the OSMA. He noted that if more physicians over 50 years of age would join the American Association of Retired People, this would establish a powerful force within that group. Doctor Crosthwait stated he is convinced that as long as the Medicare recipients can find physicians who will take care of them, they will be physician advocates; however, when they can't find or afford a physician, the screws will tighten down, and physicians are in for a long, hard battle.

Doctor Crosthwait then discussed the Physicians Rights Committee which gives physicians access to the OSMA, support on a variety of issues, and the Physicians Legal Support Committee, which helps doctors who are being sued.

## VIII. Recess

Doctor Long announced a 10-minute recess for county medical society caucuses to prepare for nominations for the various association offices. The House reconvened at 9:55 AM.

Doctor Long noted the Tulsa Delegation will caucus at 8:00 AM tomorrow in the Wyandotte Room at the Conference Center. He then announced that the Auxiliary's AMA-ERF Silent Auction ends today at 4:00 PM. Doctor Long noted the Leadership Speakers Training Session with Ms. Pam Pryor of KTOK Radio Station will take place this afternoon at 2:00 PM in the Ottawa A Room. He added that KTOK is doing a remote broadcast for 2½ hours during the Annual Meeting and expressed his appreciation for this special attention by the KTOK communication facility.

## IX. Nominations

Doctor Long announced the floor was open for nominations for the following respective officer and trustee positions:

*President-Elect* (one year term of office)

John R. Alexander, MD, Tulsa  
*Vice-President* (one year term of office)

Perry A. Lambird, MD,  
Oklahoma City

*Speaker of the House* (two year term of office)

Larry L. Long, MD, Oklahoma City  
*Vice-Speaker of the House* (two-year term of office)

Robert G. Perryman, MD, Tulsa  
*Delegate to the AMA (Position I)*

M. Joe Crosthwait, MD,  
Midwest City

*Delegate to the AMA (Position II)*

Floyd F. Miller, MD, Tulsa  
*Delegate to the AMA (Position IV)*

Perry A. Lambird, MD,  
Oklahoma City

*Alternate Delegate to the AMA (Position I)*

John R. Alexander, MD, Tulsa  
*Alternate Delegate to the AMA (Position II)*

William O. Coleman, MD,  
Oklahoma City

*Alternate Delegate to the AMA (Position IV)*

John A. McIntyre, MD, Enid  
*Trustee (District I)*

Norman A. Cotner, MD, Grove  
*Alternate Trustee (District I)*

Richard E. Martin, MD, Pryor  
*Trustee (District II)*

Ron M. Kreger, MD, Ponca City  
*Alternate Trustee (District II)*

Robert H. Phillips, MD, Stillwater  
*Trustee (District III)*

Dennis K. McIntyre, MD, Enid  
*Alternate Trustee (District III)*

James S. Gerber, MD, Okarche  
*Trustee (District IV)*

Leo Meece, MD, Woodward  
*Alternate Trustee (District IV)*

Ed L. Calhoon, MD, Beaver  
*Trustee (District V)*

Thomas J. Lowrey, MD, Yukon  
*Alternate Trustee (District V)*

Frank K. Buster, MD, Cheyenne  
*Alternate Trustee (District VI)*

Jon C. Axton, MD, Oklahoma City  
*Alternate Trustee (District VI)*

Clarence Robison, Jr., MD,  
Oklahoma City

*Alternate Trustee (District VI)*

Donald R. Carter, MD,  
Oklahoma City

*Alternate Trustee (District VIII)*

Norman L. Dunitz, MD, Tulsa

Nominations for the PLICO Board of Directors (three-year terms) were

held at this time. The incumbents listed below were nominated for re-election by the PLICO Board of Directors and the OSMA Board of Trustees (with the exception of Dr. Ed E. Rice, MD, Oklahoma City, who does not wish to stand for re-election):

William O. Coleman, MD,  
Oklahoma City  
J. B. Eskridge III, MD,  
Oklahoma City  
Eugene G. Feild, MD, Tulsa  
David M. Selby, MD, Enid

The Board of Trustees also submitted the following nominations for the PLICO Board:

Ronald S. Barlow, MD,  
Oklahoma City  
Robert N. Cooke, MD, Oklahoma City  
Joe S. Hester, MD, Muskogee

There being no other nominations, the nominations were declared closed.

Doctor Long at this time turned the meeting over to Robert G. Perryman, MD, Vice-Speaker of the House.

## X. Report of the Chairman of the Board

Doctor Perryman noted that Dr. Jerry L. Puls was not present to give the report, but the Board's Supplemental Report is available with the other late items for consideration by the House.

Doctor Perryman announced that Doctor Puls has been re-elected by the Board of Trustees to serve as Chairman for a second term, and that Dr. Sara R. DePersio was elected Vice-Chairman.

## XI. Secretary-Treasurer's Report

Doctor Perryman recognized Dr. James D. Funnell for his report, which is included in the handbooks, along with the Price Waterhouse Audit and the 1988 Budget.

## XII. Presentation of Business To Come Before the House

Doctor Perryman reminded the Delegates that only the information provided in the handbooks and the late business items will be considered at the reference committee meetings.

## XIII. Other Business

Doctor Perryman recognized Elvin M. Amen, MD, who requested his fel-



low physicians to encourage their office personnel to join the American Association of Medical Assistants.

Doctor Perryman invited the delegates to purchase their tickets to the various social functions. He noted that elections will be the first order of business when the House reconvenes Saturday at its Closing Session, and that the PLICO Forum will meet directly after the Closing Session in Salon A.

#### XIV. Necrology Report

Doctor Perryman read the Necrology Report, after which a moment of silence was observed.

##### 1987-88 Necrology Report

Victor Gary Anderson, MD  
Paul Newman Atkins, Jr., MD  
Charles Palmer Bondurant, Jr., MD  
Richard M. Burke, MD  
Alwin Marshal Clarkson, MD  
John Jerome Coyle, MD  
Charles Wallace Coyner, MD  
Charles Stewart Cunningham, MD  
John Junior Donnell, MD  
James William Finch, MD  
Eugene Richard Flock, MD  
Dan Cross Galloway, MD  
Thomas Arthur Hosty, MD  
Jay P. Irby, MD  
Rex Elmer Kenyon, MD  
Joseph Norman Kramer, MD  
Frank Cornell Lattimore, MD  
Leo Lowbeer, MD  
Charles Sylvanus Maben, MD  
Scott Allen Morris, MD  
Paul Lewis Nave, MD  
Dwight D. Pierson, MD  
Cecil Reid Reinstein, MD  
J. C. Rogers, MD  
Lawrence Edward Silvey, MD  
James C. Smith, Jr., MD  
Gladys Christine Smith, MD  
Glen Franklin Wade, MD  
Donald Owen Walker, MD  
John Ronald Watson, MD  
John Wesley Williams, MD  
George Michael Willkom III, MD

#### XV. Recess

The Opening Session of the House of Delegates was recessed at 10:30 AM.

Recorded by Toni Leverett and Susan Meeks



Perry A. Lambird, MD (center), Oklahoma City, OSMA's new vice-president, listens to speakers in the House of Delegates.



In a reference committee meeting, Ray V. McIntyre, MD, OSMA president-elect, follows the discussion carefully.

## Minutes OSMA House of Delegates CLOSING SESSION

Sunday, May 7, 1988, 9:00 AM

### I. Call to Order

The Closing Session of the 82nd Annual Meeting of the House of Delegates was called to order by Speaker Larry L. Long, MD, Oklahoma City, at 9:10 AM in the Conference Center at Shangri-La Resort, Afton, Oklahoma.

### II. Invocation

Mrs. Julie Weedn, outgoing Auxiliary President, read a poem written by the late Dr. Rex E. Kenyon and led the invocation.

### III. Report of the Credentials Committee

Dr. John A. Blaschke, MD, Chairman, announced that a quorum was present.

### IV. Remarks of the President-Elect

Dr. Ray V. McIntyre was recognized for his presentation; he expressed his appreciation for the opportunity to serve as President of the OSMA. Doctor McIntyre discussed some of the problems facing the patients and the physicians, and stressed that together OSMA physicians can be a positive force on the direction medicine will take in Oklahoma.

Doctor McIntyre emphasized the need for tort reform through legislative measures and physician education, and requested that each physician personally talk to his state senator and representative about tort reform.

Concerning the medical necessity issue, Doctor McIntyre stated that the

medical association should take a stand against this government intrusion. He asked the doctors to send in denial letters they received even though they were following proper medical protocol to indicate how many of these episodes are occurring.

In closing, Doctor McIntyre asked for ideas and input on any of the various association activities, and stressed unity among the doctors of the state.

### V. Annual PLICO Shareholders Meeting

Doctor Long declared the Annual Shareholders Meeting of PLICO was in session, and introduced C. Alton Brown, MD, President of PLICO, to present his report.

Doctor Brown announced that PLICO's financial condition is the best in its history, with total assets of \$43.8 million, and surplus capital of \$4.146 million.

Doctor Brown praised the stability of PLICO, but also stressed the crucial need for tort reform. Doctor Brown reported that PLICO still offers the lowest premiums in the US and the broadest policy, with the only occurrence type of insurance in the nation. He praised the PLICO Board of Directors who have diligently worked to keep premiums low. However, he noted, changes must be accomplished in the areas of joint and several liability, collateral sources, and possibly a cap on ad damnum damages to maintain these low rates.

Doctor Brown then reported on the various PLICO Committees, Underwriting, Audit and Finance, and

PLICO Health, all of which are an excellent job.

Doctor Brown stressed the uniqueness of PLICO, as it is the only occurrence malpractice insurer and the only guaranteed insurable, non-cancellable health insurer; because of this, doctors enjoy unrivaled quality in both of their most important insurance programs. To preserve this quality, Doctor Brown encouraged the doctors to continue to support PLICO in every way possible.

Doctor Long then declared the PLICO Annual Shareholders Meeting closed.

## VII. Elections

Doctor Long asked the tellers, Drs. Jay A. Gregory, F. W. Hollingsworth, and John B. Nettles, to come forward. He explained that ballots have been prepared for the PLICO Board of Directors, as there are seven nominees for five positions: Ronald S. Barlow, MD, Oklahoma City; William O. Coleman, MD, Oklahoma City; Robert N. Cooke, MD, Oklahoma City; J. B. Eskridge III, MD, Oklahoma City; Eugene G. Feild, MD, Tulsa; Joe S. Hester, MD, Muskogee; and David M. Selby, MD, Enid. Doctor Long noted that once the tellers have tallied the vote, the winners would be announced.

Doctor Long cited the slate of nominations prepared for the Closing Session:

John R. Alexander, MD, Tulsa,  
*President-Elect*  
Perry A. Lambird, MD, Oklahoma City,  
*Vice-President*  
Larry L. Long, MD, Oklahoma City,  
*Speaker, House of Delegates*  
Robert G. Perryman, MD, Tulsa, *Vice-Speaker, House of Delegates*  
M. Joe Crosthwait, MD, Midwest City,  
*AMA Delegate (Position I)*  
Floyd F. Miller, MD, Tulsa, *AMA Delegate (Position II)*  
Perry A. Lambird, MD, Oklahoma City, *AMA Delegate (Position IV)*  
John R. Alexander, MD, Tulsa, *AMA Alternate Delegate (Position I)*  
William O. Coleman, MD, Oklahoma City, *AMA Alternate Delegate (Position II)*  
John A. McIntyre, MD, Enid, *AMA Alternate Delegate (Position IV)*

*Trustee District I:* Craig, Delaware, Mayes, Nowata, Ottawa, Rogers & Washington Counties

*Trustee:* Norman A. Cotner, MD, Grove

*Alternate:* Richard E. Martin, MD, Pryor

*Trustee District II:* Kay, Noble, Osage, Pawnee & Payne Counties

*Trustee:* Ron M. Kreger, MD, Ponca City

*Alternate:* Donald R. Carter, MD, Oklahoma City

*Trustee District VIII:* Tulsa County

*Alternate:* Norman L. Dunitz, MD, Tulsa

There being no objection from the floor of the House, Doctor Long declared the above nominees duly



Dennis K. McIntyre, MD, Enid, and Ron M. Kreger, MD, Ponca City, are new members of the OSMA Board of Trustees.

*Alternate:* Robert H. Phillips, MD, Stillwater

*Trustee District III:* Garfield, Grant, Kingfisher & Logan Counties

*Trustee:* Dennis K. McIntyre, MD, Enid

*Alternate:* James S Gerber, MD, Okarche

*Trustee District IV:* Alfalfa, Beaver, Cimarron, Dewey, Ellis, Harper, Major, Texas, Woods & Woodward Counties

*Trustee:* Leo Meece, MD, Woodward

*Alternate:* Ed L. Calhoon, MD, Beaver

*Trustee District V:* Beckham, Blaine, Canadian, Custer & Roger Mills Counties

*Trustee:* Thomas J. Lowrey, MD, Yukon

*Alternate:* Frank K. Buster, MD, Cheyenne

*Trustee District VI:* Oklahoma County  
*Alternate:* Jon C. Axton, MD, Oklahoma City

*Alternate:* Clarence Robison, Jr., MD, Oklahoma City

elected. He congratulated the new officers and trustees and asked that they please remain for photographs after the Closing Session.

## VIII. Reference Committee Reports

Doctor Long thanked the members of the House of Delegates who participated in the Reference Committee hearings.

He then stated the Reference Committee Reports would be governed by Roberts Rules of Order. Doctor Long added that a recommendation by a Reference Committee is automatically introduced as a motion and does not require a second.

The Reference Committee Reports considered by the House are attached and made a part of the official minutes included in the July 1988 issue of the *OSMA Journal*.

### Report of Reference Committee I:

Presented by Ross Rumph, MD, Enid, Chairman



Reference Committee I approved the following items without amendment:

*Item 1. Report of the Board of Trustees* — filed for information.

*Item 2. Supplemental Report of the Board of Trustees* — adopted.

*Item 3. Report of the Secretary-Treasurer and the Report of the Committee on Appropriations and Auditing* — adopted.

*Item 5. Report of the Constitution and Bylaws Committee* — filed for information.

*Item 6. Report of the Physicians Liability Insurance Company* — filed for information.

*Item 7. Report of the Oklahoma State Medical Association Auxiliary* — filed for information.

*Item 8. Report of the Oklahomans Against Lawsuit Abuse Coalition* — filed for information.

OSMA survey results and necessary budgetary considerations.

*Item 10. Resolution 3 — Voting Privileges for Medical School Deans.*

After considerable discussion on the floor, a substitute motion was moved, seconded and approved, whereby the House accepts the recommendation of Reference Committee I, including the additional terminology (lines 19-21) concerning appropriate OSMA Constitutional amendments necessary, as well as a 30-day notice to the component county medical societies. The resolution will then be reintroduced to the 1989 OSMA House of Delegates.

Reference Committee I referred the following item:

*Item 11. Resolution 12 — Osteopathic Membership in OSMA.*

The Reference Committee recom-

*Item 9. Report of the Ad Hoc Committee on Tenure of Office of AMA Delegates and Alternate Delegates.*

The Reference Committee recommended that this report not be adopted as written, with which the House concurred, and in lieu listed several recommendations for consideration by the House.

Recommendation #I of the report be accepted as written — the House concurred.

Recommendation #II of the report not be accepted — there was considerable debate on the floor. A substitute motion was denied, whereby any OSMA physician member in good standing in the State of Oklahoma could run for the position of Delegate or Alternate Delegate to the AMA; however, if the physician is retired, it must be so noted on the ballot. The House then voted that Recommendation #II of the report not be accepted, in agreement with the Reference Committee.

Recommendation #III not be accepted, and a substitute recommendation be approved, concerning geographical allocation of AMA Delegate and Alternate Delegate positions. There was considerable discussion on the floor of the House, after which a substitute motion carried, whereby the House of Delegates adopted the original recommendation of the Ad Hoc Committee, stating that "The Committee recommends there be at least twice as many candidates as there are open slots for Delegate and Alternate Delegate positions."

Recommendation #IV of the report be accepted as written — the House concurred.

Recommendation #V of the report be accepted as written — the House concurred.

*Item 12. Late Resolution 18 — University of Oklahoma Clinical Faculty.*

The Reference Committee recommended, and the House concurred, adoption of the following Substitute Resolution in lieu of Late Resolution 18:

*"Resolved, That all physicians in the State of Oklahoma should have the option to fully participate in all such plans offered by tax supported institutions; and be it further*

*"Resolved, That this resolution be referred to the Board of Trustees for clarification and action."*



Irwin H. Brown, MD, Oklahoma City, refers to his handbook during a reference committee meeting. Seated beside him is William O. Coleman, MD, also of Oklahoma City.

Reference Committee I approved the following items as amended:

*Item 4. Report of the Council on Planning and Development.*

The Reference Committee recommended that Item #3, Page 3, Lines 18-22, regarding a fall scientific program, be referred back to this council for further study pending the final

mended that this resolution be referred to the Council on Planning and Development for further study. However, after discussion on the floor, the House of Delegates voted that Resolution 12 not be adopted.

Reference Committee I rejected the following items:



Tellers John B. Nettles, MD, Tulsa; Jay A. Gregory, MD, Muskogee; and Francis W. Hollingsworth, MD, El Reno, count ballots.

The Report of Reference Committee I was then approved by the House as a whole, as amended.

#### Report of

#### Reference Committee II

Presented by Donald R. Carter, MD, Oklahoma City, Chairman

Reference Committee II approved the following items without amendment:

*Item 1. Report of the President* — filed for information.

*Item 2. Report of the President-Elect* — filed for information.

*Item 3. Report of the Council on Professional and Public Relations* — adopted.

*Item 4. Report of the Council on Public and Mental Health* — adopted.

*Item 5. Report of the Council on Medical Education* — adopted.

*Item 6. Report of the Council on Medical Services* — adopted.

*Item 7. Report of the Young Physicians Section* — adopted.

*Item 8. Report of the Medical Students Section* — adopted.

*Item 10. Report of the Committee on Medical Ethics and Competency* — the Committee Chairman, Dr. James B. Pitts, Jr., presented a brief report on the Committee's purpose, as no written report was available.

*Item 11. Report of the Task Force on AIDS* — adopted.

*Item 12. Report of the Oklahoma*

*Foundation for Peer Review* — filed for information.

*Item 13. Report of the Journal of the Oklahoma State Medical Association* — filed for information.

*Item 16. Resolution 7 — Hemoglobinopathy Screening* — adopted.

*Item 17. Resolution 8 — Psychiatry Residency Training* — adopted.

*Item 19. Resolution 10 — Prenatal Care and Funding* — adopted.

*Item 21. Resolution 15 — "Ten Commandments" of Peer Review* — adopted.

Reference Committee II approved the following item as amended:

*Item 9. Report of the Hospital Medical Staff Section* — adopted.

The Reference Committee further recommended that the OSMA Board of Trustees study and make a recommendation at next year's Annual Meeting as to whether the Section should be continued.

Reference Committee II referred the following items:

*Item 18. Resolution 9 — Continuing Medical Education* — the Reference Committee recommended, and the House concurred, that this resolution be referred to the OSMA Board of Trustees for study and that the Board of Trustees report back to the OSMA House of Delegates next year.

*Item 22. Late Resolution 18 — Yearly Physicals for Student Athletes*

— the Reference Committee recommended, and the House concurred, that this resolution be referred to the OSMA Board of Trustees for study by an appropriate OSMA committee, and that the Board of Trustees report back to the OSMA House of Delegates at next year's Annual Meeting.

Reference Committee II rejected the following items:

*Item 14. Resolution 1 — Peer Review* — not adopted.

*Item 15. Resolution 2 — Medicare Reimbursement* — the Reference Committee reported that the principle of single-state reimbursement is already OSMA policy and recommended that the resolution was moot and should not be adopted; however, after some discussion, the House approved a motion that the present policy be reaffirmed rather than rejecting the resolution.

*Item 20. Resolution 14 — Deunification of AMA, OSMA, and State Societies* — not adopted.

The Report of Reference Committee II was then approved by the House as a whole, as amended.

Doctor Long turned the meeting over to Robert G. Perryman, MD, Vice-Speaker of the House.



### Report of

#### Reference Committee III

Presented by William C. Stone, MD, Tulsa, Chairman

Reference Committee III approved the following items without amendment:

*Item 1. Report of the Council on Governmental Activities* — adopted.

*Item 2. Report of the Council on State Legislation* — adopted.

*Item 3. Report of the Council on Member Services* — adopted.

*Item 5. Report of the Oklahoma Medical Political Action Committee* — filed for information.

*Item 6. Report of the Physician Recovery Committee* — adopted.

*Item 9. Resolution 13 — Hydration and Nutrition Act* — adopted.

*Item 10. Late Resolution 17 — University of Oklahoma's Request for Funding* — adopted.

Reference Committee III approved the following item as amended:

*Item 4. Report of the Ad Hoc Committee on Physician Legal Action Support* — adopted.

In addition, the Reference Committee recommended, and the House concurred, that the following be adopted: "That there be created a Physician Legal Action Support Committee and assign it to the OSMA Council on Member Services."

Reference Committee III rejected the following items:

*Item 7. Resolution 4 — Health Insurance Coverage for Medical Treatment of Mental Disorders; Resolution 5 — Health Insurance Coverage for Medical Treatment of Alcoholism, Drug Dependence and Mental Disorders; and Resolution 6 — Health Insurance Coverage for Medical Treatment of Alcoholism, Drug Dependence and Mental Disorders* — the Reference Committee recommended, and the House concurred, that the following Substitute Resolution be adopted in lieu of Resolutions 4, 5, and 6:

"Resolved, That the question of increased health insurance coverage for medical treatment of mental disorders, alcoholism, and drug dependence be reviewed and studied by the Physicians Liability Insurance Company in an effort to derive an economical and proper solution."

"Resolved, That the President of the OSMA, Executive Director of the Association, as well as the Chairman of the Board of Trustees meet and decide the appropriate course of action." After discussion by the House, it was moved, seconded and carried that the original Resolution 11 be approved, rather than the Substitute Resolution.

The Report of Reference Committee II was then approved by the House as a whole, as amended.

### IX. Other Business

Doctor Perryman announced the election results for the PLICO Board of Directors: William O. Coleman, MD, Oklahoma City; J. B. Eskridge III, MD, Oklahoma City; Eugene G. Feild, MD, Tulsa; Joe S. Hester, MD, Muskogee; and David M. Selby, MD, Enid.

Under Other Business, Dr. Gordon H. Deckert discussed the merger of the Oklahoma College of Osteopathic Medicine and Surgery with Oklahoma State University, and urged that some kind of study be done on the situation. Doctor Perryman noted the matter will be turned over to OSMA's new President, Dr. Ray McIntyre.

Doctor Perryman expressed thanks to those who have worked hard to make this year's Annual Meeting a success. He then noted the AMA Delegates and Alternates will meet in the Seminole Room following the Closing Session; the PLICO Forum will meet in Salon A directly after this meeting; the PLICO Loss Prevention Seminar is scheduled for 1:00 to 4:00 PM in Salon A; and a "come and go" buffet luncheon is set up in Salon D until 1:00 PM.

### X. Adjournment

There being no further business, the Closing Session of the 82nd meeting of the OSMA House of Delegates adjourned at 11:05 AM.

Recorded by Toni Leverett and Debbie Hinson, Recording Secretaries





John R. Alexander, MD, Tulsa, is the OSMA's new president-elect.

## OSMA House of Delegates RESOLUTIONS

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### RESOLUTION 1

(Not Adopted)

Introduced by: Pontotoc-Johnston-  
Murray County Medical Society  
Joann Carpenter, MD, President  
Subject: **Peer Review**  
Referred to: Reference Committee II

WHEREAS, It was initially understood that the Oklahoma Foundation for Peer Review was established to improve the quality of care and would achieve this through review and education; and

WHEREAS, A local competent surgeon has been reviewed and sanctioned for one year; neither he nor the hospital will receive reimbursement from Medicare during this period for services rendered, the effect of which has been devastating to his career; and

WHEREAS, Such a situation evokes the suspicion that the Oklahoma Foundation for Peer Review is more interested in punitive than in educational measures and indicates that OFPR has lost sight of the original organizational goals; and

WHEREAS, There is an evident disparity in the number of rural physicians, sanctioned by the review organization, as compared with urban physicians; and

WHEREAS, The membership of the Pontotoc County Medical Society feels the Oklahoma Foundation for Peer Review is not dealing fairly with Okla-

homa physicians; now therefore be it

*Resolved*, That the Oklahoma State Medical Association review its relationship with the Oklahoma Foundation for Peer Review; and be it further

*Resolved*, That if satisfactory evidence cannot be found that the Oklahoma Foundation for Peer Review intends to modify its practices, that the Oklahoma State Medical Association should withdraw its support of OFPR.

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### RESOLUTION 2

(Reaffirmed Present Policy)

Introduced by: Northwest County  
Medical Society

Helen Chiou, MD, President

Subject: **Appropriate and  
Equitable Medicare  
Reimbursement**

Referred to: Reference Committee II

WHEREAS, For Medicare reimbursement purposes, Oklahoma is divided into five geographic zones; and

WHEREAS, Zone reimbursement differentials affect the availability, accessibility, quality, and cost of health care to Oklahomans; and

WHEREAS, The numerous changes in Medicare reimbursement over the past few years have served only to further increase reimbursement differentials between urban and rural zones; and

WHEREAS, This continued reimbursement differential is resulting in

higher out-of-pocket cost to rural consumers and, at the same time, discouraging physicians from entering a rural practice; now therefore be it

*Resolved*, That the Oklahoma State Medical Association encourage the Health Care Financing Administration to establish Oklahoma as a single state reimbursement area which will more equitably and appropriately meet the health care needs of its citizens.

### RESOLUTION 3

(Referred)

Introduced by: OSMA Delegation  
to the AMA

M. Joe Crosthwait, MD,  
Chairman

Subject: **Voting Privileges for  
Medical School Deans**

Referred to: Reference Committee I

WHEREAS, Oklahoma physicians, true to the tenets of the Hippocratic Oath, played and continue to play a major role in the development of medical education in Oklahoma, through their work as clinical faculty members; and

WHEREAS, Oklahoma's medical colleges rank among the nation's best; and

WHEREAS, Faculty physicians and community physicians have a long history of cooperation in improving medicine and medical education; and

WHEREAS, The OSMA seeks to enhance that spirit of cooperation by granting formal representation to our state's medical colleges in the OSMA governing House of Delegates; now therefore be it

*Resolved*, That the OSMA Constitution and Bylaws be amended so as to grant voting privileges in the OSMA House of Delegates automatically and without need of county election to the deans or interim deans of each Oklahoma allopathic medical school.

### RESOLUTION 4

(Not Adopted)

Introduced by: Council on Public and  
Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Health Insurance Cover-**

### age for Medical Treatment of Mental Disorders

Referred to: Reference Committee III

WHEREAS, The American Medical Association has officially endorsed mandated nondiscriminatory full insurance coverage for psychiatric treatment; and

WHEREAS, The Oklahoma State Department of Health and the Oklahoma State Medical Association have agreed to cosponsor the Prescription Abuse Data Synthesis (PADS) project in Oklahoma; and

WHEREAS, The Oklahoma PADS Report submitted to Governor Bellmon makes four specific recom-



Enjoying a break are Tulsans George H. Kamp, MD (left), and Michael J. Haugh, MD.

WHEREAS, The American Medical Association supports state legislation to mandate nondiscriminatory full insurance coverage for such treatment; now therefore be it

*Resolved*, That the resources of the Oklahoma State Medical Association's Council on State Legislation and the OSMA Director of State Legislation will be used to support such legislation.

### RESOLUTION 5

(Not Adopted)

Introduced by: Council on Public and  
Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Health Insurance  
Coverage for Medical Treatment  
of Alcoholism, Drug  
Dependence and Mental  
Disorders**

Referred to: Reference Committee III

mendations including legislation mandating nondiscriminatory full insurance coverage for alcoholism, drug dependence, and mental health treatment in Oklahoma; now therefore be it

*Resolved*, That the Oklahoma State Medical Association actively supports legislation mandating nondiscriminatory full insurance coverage for mental health treatment in Oklahoma.

### RESOLUTION 6

(Not Adopted)

Introduced by: Council on Public and  
Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Health Insurance Cover-  
age for Medical Treatment of  
Alcoholism, Drug Dependence  
and Mental Disorders**

Referred to: Reference Committee I



WHEREAS, Mental disorders including alcoholism and drug dependence are well documented serious medical problems in Oklahoma and other states; and

WHEREAS, The American Medical Association has officially endorsed mandated nondiscriminatory full insurance coverage for psychiatric treatment; now therefore be it

*Resolved*, That the Oklahoma State Medical Association supports nondiscriminatory full insurance coverage, including both outpatient as well as inpatient care, for psychiatric treatment, including medical psychotherapy for these disorders; and be it further

*Resolved*, That Physicians Liability Insurance Company (PLICO) be instructed to provide full nondiscriminatory insurance coverage for medical treatment of alcoholism, drug dependence, and mental disorders.

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## **SUBSTITUTE RESOLUTION 4, 5, AND 6**

(Adopted)

*Resolved*, That the question of increased health insurance coverage for medical treatment of mental disorders, alcoholism, and drug dependence be reviewed and studied by the Physicians Liability Insurance Company in an effort to derive an economical and proper solution.

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## **RESOLUTION 7**

(Adopted)

Introduced by: Council on Public and Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Hemoglobinopathy  
Screening of Newborn Infants**  
Referred to: Reference Committee II

WHEREAS, Approximately one in 5,000 infants are born each year in Oklahoma with a significant hemoglobinopathy; and

WHEREAS, Up to 35% of infants with significant hemoglobinopathies die prematurely from overwhelming infections each year in Oklahoma, and many others experience serious infections; and

WHEREAS, Early prophylactic penicillin in infants with significant hemoglobinopathies has been demonstrated to prevent morbidity and death from overwhelming infections; now therefore be it

*Resolved*, That the Oklahoma State Department of Health expand newborn screening to include the screening of all newborns for significant hemoglobinopathies and implement a follow-up system to assure that appropriate prophylactic care is available to those who require it.

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## **RESOLUTION 8**

(Adopted)

Introduced by: Council on Public and Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Psychiatric Residency  
Training**

Referred to: Reference Committee II

WHEREAS, There is a considerable shortage of psychiatrists in both the public and private sectors of Oklahoma; and

WHEREAS, The University of Oklahoma College of Medicine graduates medical students entering Psychiatry consistently above the national average; and

WHEREAS, There are frequently more graduates of Oklahoma medical schools entering Psychiatry than there are first year positions in psychiatric residencies in Oklahoma; and

WHEREAS, The Oklahoma State Medical Association has already encouraged the Physician Manpower Training Commission and appropriate state officials and agencies to take note of this matter; now therefore be it

*Resolved*, That the Oklahoma State Medical Association encourage the Legislature and the Physician Manpower Training Commission to work cooperatively toward including psychiatric residency training as a function of the PMTC.

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## **RESOLUTION 9**

(Referred)

Introduced by: Oklahoma Academy of Family Physicians  
Les Walls, MD, President

## **Subject: Continuing Medical Education**

Referred to: Reference Committee II

WHEREAS, An increasing number of states are mandating continuing medical education for licensure; and

WHEREAS, It is desirable to maintain physician control rather than state control of continuing medical education; and

WHEREAS, We continue to encounter new concepts and technologies requiring changes in medical practice; and

WHEREAS, Failure to keep abreast of such changes places a physician and therefore our insurance plan at greater risk of malpractice loss; and

WHEREAS, Further motivation is needed to cause some physicians to obtain adequate continuing medical education; and

WHEREAS, Mandatory physician continuing medical education would lead to a greater number of in-state continuing medical education programs; and

WHEREAS, The Oklahoma Academy of Family Physicians has over the past 40 years demonstrated the feasibility of a continuing medical education requirement for membership by requiring members to obtain 150 hours of continuing medical education every 3 years; now therefore be it

*Resolved*, That the Oklahoma State Medical Association act now to require ongoing continuing medical education of its members rather than waiting for the State of Oklahoma to mandate continuing medical education for licensure.

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## **RESOLUTION 10**

(Adopted)

Introduced by: Council on Public and Mental Health

Robert M. Mahaffey, MD,  
Chairman

Subject: **Prenatal Care and  
Funding**

Referred to: Reference Committee II

WHEREAS, Over 10,000 Oklahoma women (or one-fifth of all pregnant women in the state) receive inadequate prenatal care; and

WHEREAS, Inadequate prenatal care results in an increased number



of births of low birth weight infants; and

WHEREAS, The cost effectiveness of prenatal care is unquestioned since every dollar spent on prenatal care saves \$3.38 on neonatal intensive care of low birth weight infants; and

WHEREAS, The Oklahoma infant mortality rate is substantially above the national average due to the large number of low birth weight infants; and

WHEREAS, Legislation (SOBRA and OBRA) has been enacted which provides many more women access to prenatal care; and

WHEREAS, The Governor of Oklahoma has declared this the "Year of the Child" in our state; now therefore be it

*Resolved*, That the Oklahoma State Medical Association endorse and support the need for adequate prenatal care for all Oklahoma women; and be it further

*Resolved*, That the State of Oklahoma, under the auspices of the Department of Human Services, expand coverage for pregnant women up to 185% of poverty level in order to capture \$20 million in available federal matching funds.

## RESOLUTION 11

(Adopted)

Introduced by: Cleveland-McClain County Medical Society

Charles L. Lackey, MD, President

Subject: **Redress of Grievances Against Yellow Page Directory Companies**

Referred to: Reference Committee III

WHEREAS, Both patients and physicians are at the mercy of yellow page telephone directories; and

WHEREAS, The yellow page telephone directories are frequently in error concerning physician listings and advance advertising cost quotations; and

WHEREAS, Without individual legal action, the physician is powerless to obtain redress or damages against yellow page directory companies; now therefore be it

*Resolved*, That the Oklahoma State Medical Association shall seek legislative and/or legal relief for member physicians wronged or damaged by

yellow page directory companies; and be it further

*Resolved*, That the Oklahoma State Medical Association shall seek legislation placing yellow page directory companies under Oklahoma Corporation Commission review.

## RESOLUTION 12

(Not Adopted)

Introduced by: Tulsa County Medical Society

William E. Harrison, Jr., MD, President

Subject: **Osteopathic Membership in OSMA**

Referred to: Reference Committee I

WHEREAS, The Board of Directors and the membership of Tulsa County Medical Society have approved accepting Doctors of Osteopathy as members; and

WHEREAS, In order to remain in compliance with the Constitution and Bylaws of the Oklahoma State Medical Association; now therefore be it

*Resolved*, That the Constitution and Bylaws of Oklahoma State Medical Association be changed to include Doctors of Osteopathy, and to read as follows: "Every legally licensed Medical Doctor and Doctor of Osteopathy according to the laws of the State of Oklahoma who is of good moral character and professional reputation, who does not support or practice any exclusive or sectarian system of diagnosis and treatment, and who meets the qualifications set forth in the Bylaws, shall be eligible to apply for membership in this Society."

## RESOLUTION 13

(Adopted)

Introduced by: Tulsa County Medical Society

William E. Harrison, Jr., MD, President

Subject: **Hydration and Nutrition Act**

Referred to: Reference Committee III

WHEREAS, The Oklahoma State Legislature passed House Bill 1189, known as the Hydration and Nutrition for Incompetent Patients Act, into law in 1987; and

WHEREAS, In treating a terminally ill or irreversibly comatose patient, the physician and family should determine whether the benefits of treatment outweigh its burdens; and

WHEREAS, The American Medical Association Council on Ethical and Judicial Affairs and the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research have stated that, under certain conditions and with the approval of the patient, his family or legal representative, it is not unethical to discontinue all means of life-prolonging medical treatment including hydration and nutrition; now therefore be it

*Resolved*, That Oklahoma State Medical Association request the Oklahoma State Legislature to consider amending or overturning House Bill 1189, known as the Hydration and Nutrition for Incompetent Patients Act.

## RESOLUTION 14

(Not Adopted)

Introduced by: Patrick D. Lester, MD, Tulsa

Subject: **Deunification of AMA, OSMA, and State Societies**

Referred to: Reference Committee I

WHEREAS, Tulsa County Medical Society is a component of the Oklahoma State Medical Society; and

WHEREAS, The Oklahoma State Medical Association is a component of the American Medical Association; and

WHEREAS, Membership in the American Medical Association is a prerequisite for membership in the Oklahoma State Medical Association, which membership is required for membership in the Tulsa County Medical Society;

WHEREAS, The goals, objectives, practices, and representations of the American Medical Association do not always represent the greater good of the OSMA and its component societies; and

WHEREAS, The scientific, educational, economic, and political issues facing medicine are best managed on the county or state level of organized medicine; and

WHEREAS, Other states have suc-

cessfully developed organized medicine infrastructure without having agreement affiliations mandating membership in the American Medical Association at the state and county levels; and

WHEREAS, Many physicians in Oklahoma, and specifically Tulsa County, would like to be involved in their county medical society, without mandated membership in the American Medical Association (with which they may have diametrically opposite philosophical views); now therefore be it

*Resolved*, That full membership in the county medical societies be the sole determination of the individual medical society, based upon its own standards for membership; and be it further

*Resolved*, That the county medical societies continue to support the Oklahoma State Medical Association, including promotion of its membership, but the continuation and privileges of membership in the county medical society shall not be contingent upon membership in the American Medical Association.

## RESOLUTION 15

(Adopted)

Introduced by: M. Boyd Shook, MD  
Subject: "Ten Commandments" of  
Peer Review

Referred to: Reference Committee II

WHEREAS, M. Boyd Shook, MD, President of the OFPR Board of Directors, submits the following guidelines for the House of Delegates' consideration:

(1) THOU SHALT NOT USE VAGUE TERMS IN DESCRIBING REVIEW. Be specific in comments. Point out the precise reasons for the criticisms, e.g., "the sodium was low and should have been corrected before discharge."

(2) THOU SHALT NOT USE STRONG EMOTIVE WORDS IN REVIEW. Avoid emotion-laden words in critique. Such words as "the worst care I have seen," becomes highly inflammatory when read by a lawyer. Such harsh words also make us look silly if we later reverse the decision.

(3) THOU SHALT BASE ALL DE-

CISIONS UPON FACTS AVAILABLE AT THE TIME OF CARE. Decisions about community standards must be based upon facts which the physician had at the time. Do not use the retrospectroscope.

(4) THOU SHALT BASE NO DECISIONS UPON OUTCOME. Our review is process determined. Outcome



Ed L. Calhoon, MD, Beaver, addresses the Board of Trustees.

evaluation is done only to identify an area that needs further review.

(5) THOU SHALT UTILIZE DYNAMIC COMMUNITY STANDARDS. Community standards are dynamic. They must be appropriate for the given circumstance, e.g., ABGs are more easily obtained in large hospitals; drug levels must be sent away in some small hospitals; emergency departments function at a completely different level from one place to another.

(6) THOU SHALT ALLOW THE BENEFIT OF THE DOUBT TO GO TO THE PHYSICIAN WHO IS AT THE BEDSIDE. Borderline calls are

decided in favor of the physician.

(7) THOU SHALT RECOGNIZE THAT MEDICINE IS NOT PRACTICED AS A PERFECT SCIENCE. THERE ARE VARIATIONS IN THE COMMUNITY. Community standards represent the full community. This is not the same as "perfect" textbook medicine.

(8) THOU SHALT MATCH REVIEW TO TRUE PEERS WHENEVER POSSIBLE. When in doubt about a standards call, ask one in the precise peer group.

(9) THOU SHALT NOT REVIEW FRIENDS OR COMPETITORS. Be wary of reviewing a colleague who is a strong competitor of yours. Conflict of interest laws are deadly. Pass that chart to someone else.

(10) THOU SHALT NOT JUMP TO A PREMATURE DECISION. Be assiduously careful about a decision until all the facts are in. Poor documentation may be the only deficit or it may represent a true quality lapse; now, therefore be it

*Resolved*, That the OSMA House of Delegates adopt the ten guidelines as stated above.

(Late Resolution)

## RESOLUTION 16

(Referred)

Introduced by: Northwest County  
Medical Society

Helen Chiou, MD, President  
Subject: Yearly Physicals for  
Student Athletes

Referred to: Reference Committee II

WHEREAS, Doing yearly physicals on the young student athlete produces minimal benefit to the health status of the athlete; now therefore be it

*Resolved*, That it be recommended to the Oklahoma State Athletic Association that physicals should be done

(a) at the start of the student's first year of sports participation in his grade school or junior high school competition

(b) at the start of his first year of senior high school competition, and

(c) if he should be a transfer from another school district; and be it further

*Resolved*, That at the beginning of each of his other competitive years, a



statement should be obtained from the student's parents that to the best of their knowledge, that student has sustained no serious permanent injury or serious illness since his last physical or previous statement; and be it further

*Resolved*, That if such an injury or illness has occurred, that student will need a statement from the attending physician during that illness or injury stating that he can participate in athletics.

(Late Resolution)

**RESOLUTION 17**

(Adopted)

Introduced by: M. Joe Crosthwait,  
MD, Midwest City  
Subject: **University of Oklahoma's  
Request for Funding**  
Referred to: Reference Committee III

WHEREAS, Family Physicians are an essential part of the health care delivery system in Oklahoma and are located throughout the state in both rural and urban locations; and

WHEREAS, The University of Oklahoma College of Medicine has made a substantial commitment to and investment in developing an outstanding faculty and program to teach family medicine and prepare practitioners to meet the needs of the State of Oklahoma; and

WHEREAS, The State Legislature and Governor recognized the facility

needs of the Department of Family Medicine in 1981 and appropriated \$850,000 in 1982 with the intent of funding the remainder in 1983; and

WHEREAS, Unanticipated revenue declines forced the Legislature and Governor to cancel all capital funding planned for 1983; and

WHEREAS, The Department of Family Medicine at the Health Sciences Center in Oklahoma City is composed of nationally recognized faculty who have developed teaching and research programs which are contributing to the College of Medicine and to the health and welfare of the citizens of the State of Oklahoma; and

WHEREAS, The Department of Family Medicine at the Health Sciences Center is still operating out of inadequate and widely dispersed facilities which include old houses, leased space in an office building which is for sale, and a trailer, and this is causing significant operating, financial and morale problems within the Department; now therefore be it

*Resolved*, That the Oklahoma State Medical Association supports the University of Oklahoma's request for appropriations to complete state funding for a Family Medicine Building at the Health Sciences Center; and be it further

*Resolved*, That copies of this resolution be transmitted to the appropriate University of Oklahoma officials and to the Governor, to the Speaker of the House of Representatives, and to the President Pro Tempore of the Senate.

(Late Resolution)

**RESOLUTION 18**

(Not Adopted)

Introduced by: George H. Kamp, MD,  
and Floyd F. Miller, MD, Tulsa  
Subject: **University of Oklahoma  
Clinical Faculty**  
Referred to: Reference Committee I

WHEREAS, The clinical faculty of the University of Oklahoma medical schools provides essential teaching for the students and resident physicians of those institutions and their associated residency programs; and

WHEREAS, The University of Oklahoma medical schools are increasingly involved in alternative health care plans; now therefore be it

*Resolved*, That the clinical faculty should have the option to fully participate in all such plans.

**SUBSTITUTE****RESOLUTION 18**

(Adopted)

*Resolved*, That all physicians in the State of Oklahoma should have the option to fully participate in all such plans offered by tax supported institutions; and be it further

*Resolved*, That this resolution be referred to the Board of Trustees for clarification and action.



# Reference Committee I REPORTS TO THE HOUSE OF DELEGATES

## Report of REFERENCE COMMITTEE I

Presented by: Ross Rumph, MD,  
Chairman

Mr Speaker and Members of the House  
of Delegates:

Reference Committee I considered a  
number of items that were assigned  
and listened to ample testimony and  
we submit the following report:

### (1) Report of the Board of Trustees

#### *Recommendation:*

Mr Speaker, your Reference Com-  
mittee recommends that the Report  
of the Board of Trustees be filed for  
information.

Your Reference Committee com-  
mends the Board for its diligent deci-  
sions made on behalf of the Associa-  
tion and would especially like to com-  
mend Dr. Jerry L. Puls, Tulsa, for his  
service as Chairman and Dr. Lanny F.  
Trotter, Stillwater, who served as Vice-  
Chairman through November 15,  
1987, at which time he resigned to re-  
locate his practice to Georgia.

### (2) Supplemental Report of the Board of Trustees

#### *Recommendation:*

Mr Speaker, your Reference Com-  
mittee recommends that the Sup-  
plemental Report of the Board of  
Trustees be adopted.

This report contains a provision for  
an OSMA dues increase to \$250. Your  
Reference Committee listened to tes-  
timony supporting several programs of  
our Association and the fact that  
OSMA dues have remained constant  
since 1982. Your Reference Committee  
also reviewed statistics that OSMA  
has a lower dues structure as com-  
pared to surrounding states. Through  
the programs of our Association such  
as legislative activities, physician  
members have realized savings far in  
excess of such a dues increase. Your  
Reference Committee agreed that a  
dues increase is necessary in order to  
preserve the viability of our Associa-  
tion.

Reference Committee I also wishes  
to express regret that Doctor Mark  
Johnson plans to resign as Editor-in-  
Chief of the *OSMA Journal*. Your Ref-  
erence Committee would like to com-  
mend Dr. Johnson for his years of ser-  
vice and dedication to the excellence  
of the *OSMA Journal*.

### (3) Report of the Secretary- Treasurer and Report of the Committee on Appropriations and Auditing

#### *Recommendation:*

Mr Speaker, your Reference Com-  
mittee recommends that the Report  
of the Secretary-Treasurer and Re-  
port of the Committee on Appropri-  
ations and Auditing be adopted.  
The Reference Committee would



Rod Frates, president of C.L. Frates & Co.,  
fields questions about the PLICO report  
during a reference committee meeting.

like to express its sincere appreciation to Dr. James D. Funnell for his prudent oversight as Secretary-Treasurer of the Oklahoma State Medical Association.

#### **(4) Report of the Council on Planning and Development**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Council on Planning and Development be filed with the following instructions:

Your Reference Committee recommends Item #3, Page 3, Lines 18-22, regarding a fall scientific program be referred back to the Council on Planning and Development for further study pending the final OSMA survey results and necessary budgetary considerations.

#### **(5) Report of the Constitution and Bylaws Committee**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Constitution and Bylaws Committee be filed for information.

#### **(6) Report of the Physicians Liability Insurance Company**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Physicians Liability Insurance Company be filed for information.

Mr. Speaker, one cannot miss the numerous stories and articles that appear daily in the media and press about the impact of the professional liability crisis affecting our fellow physicians in virtually every state. We physicians who practice in Oklahoma have benefited from a self-administered insurance company. Your Reference Committee wishes to commend the Association's leadership and specifically the PLICO Board for their continued fiduciary management.

#### **(7) Report of the Oklahoma State Medical Association Auxiliary**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the OSMA Auxiliary be filed for information.

Mr. Speaker, your Reference Committee would like to commend Mrs.

Julie Weedn, Auxiliary President, for her excellent leadership and dedication to the programs of the Auxiliary.

#### **(8) Report of Oklahomans Against Lawsuit Abuse Coalition**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report



Julie Weedn, Duncan, is the retiring president of the OSMA Auxiliary.

of the Oklahomans Against Lawsuit Abuse Coalition be filed for information.

Mr. Speaker, the tort reform issue continues to be a high priority with many businesses, professional groups, chambers of commerce and the Governor's office. The Association has been deeply involved in trying to seek some relief in the Civil Court system through tort legislation. Your Reference Committee encourages all physicians to become more politically involved through OMPAC and IMPACT to elect legislators that will support our efforts with tort reform.

#### **(9) Report of the Ad Hoc Committee on Tenure of Office of AMA Delegates and Alternate Delegates**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Ad Hoc Committee on Tenure of Office of AMA Delegates and Al-

ternate Delegates not be adopted as written.

Mr. Speaker, your Reference Committee reviewed each of the recommendations contained in this report separately as follows:

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Recommendation #I of this report be accepted as written.

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Recommendation #II of this report not be accepted.

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Recommendation #III not be accepted as written, but substitute the following:

That the AMA Delegate and Alternate Delegate positions be allocated as follows:

Two (2) Delegate and Alternate Delegate positions from Oklahoma County.

Two (2) Delegate and Alternate Delegate positions from Tulsa County.

Two (2) Delegate and Alternate Delegate positions from non-Oklahoma and non-Tulsa Counties.

One (1) Delegate and Alternate Delegate position at-large.

There shall be a minimum of two (2) candidates nominated for each position.

Physicians must be nominated specifically for Delegate slots or Alternate Delegate slots.

It is recommended that the OSMA use all appropriate means to encourage county medical societies to nominate physicians for open Delegate and Alternate Delegate positions. It is the Committee's hope that there be three, four or more times as many candidates as there are open slots.

All nominations must be submitted in writing to the OSMA Board of Trustees fifteen (15) days in advance of the OSMA Annual Meeting.

If the minimum number of candidates is not received fifteen (15) days prior to the Annual Meeting, the Executive Committee of the OSMA Board of Trustees will be required to name the necessary number of candidates.

This recommendation is to be referred to the Board of Trustees for im-



plementation beginning with the 1989 Annual Meeting.

*Recommendation:*

Mr. Speaker, your Reference Committee recommends that Recommendation #IV be accepted as written.

*Recommendation:*

Mr. Speaker, your Reference Committee recommends that Recommendation V be accepted as written.

**(10) Resolution 3 — Voting Privileges for Medical School Deans**

*Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution #3 be reintroduced to the 1989 OSMA House of Delegates.

Mr. Speaker, your Reference Committee agreed with the intent of Resolution #3, but recommends that it be referred back to the OSMA Delegation to the AMA for reintroduction to the 1989 OSMA House of Delegates with clarification requesting three at-large delegate positions for the deans of the Oklahoma University School of Medicine, the University of Oklahoma Tulsa Medical College and Oral Roberts University School of Medicine.

**(11) Resolution 12 — Osteopathic Membership in OSMA**

*Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution #12 be referred to the Council on Planning and Development for further study.

**(12) Resolution 18 — University of Oklahoma Clinical Faculty**

*Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution #18 not be adopted and the following resolution be adopted:

*Resolved*, That all physicians in the state of Oklahoma should have the option to fully participate in all such plans offered by tax supported institutions, and be it further

*Resolved*, That this resolution be referred to the Board of Trustees for clarification and action.

Mr. Speaker, your Reference Committee recommends adoption of the Report of Reference Committee I, as amended, as a whole.

Mr. Speaker, this concludes the report of the Reference Committee I. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report. As chairman of this Reference Committee, I would like to express my appreciation to the committee members and staff for their time and effort.

Respectfully submitted,  
Ross Rumph, MD, Enid, Chairman  
Donald C. Karns, MD, Enid  
W. Frank Phelps, MD, Tulsa  
Theodore W. Violett, MD,  
Oklahoma City  
James R. Wendelken, MD,  
Oklahoma City  
Robert C. Wright, MD, Stillwater  
Carol Blackwell-Imes, MD,  
Oklahoma City  
Lyle Kelsey, Staff  
Debbie Hinson, Staff

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## Report of the BOARD OF TRUSTEES

**Subject: Annual Report**

Presented by: Jerry L. Puls, MD,  
Chairman

Referred to: Reference Committee I

**Introduction**

The OSMA Board of Trustees has completed three of its regular quarterly meetings for organizational year 1987-88. The fourth, or annual meeting, of the board is being held in conjunction with the 1988 annual meeting of the association at Shangri-La in Afton, Oklahoma. The proceedings of the annual board meeting will be contained in the Supplemental Report of the Board of Trustees.

During the past year, the board met in regular sessions on September 13 and November 15, 1987, and February 7, 1988. A quorum was certified for each meeting with an average of 7 officers, 17 trustees or alternate trustees, and 9 AMA delegates and alternate delegates present.

**Council and Committee Reports**

During each of its meetings the OSMA Board of Trustees reports were heard from each of the association's councils and committees. As each individual council and committee also re-

ports directly to the House of Delegates, these reports to this board will not be reproduced here.

**PLICO, OFPR, and Auxiliary Reports**

The OSMA Board heard reports from PLICO, OFPR and the Auxiliary during each of its three quarterly meetings. As these organizations will report directly to the House of Delegates, they will not be reported here.

**OSMA Support for the College of Dentistry**

During last year's meeting of the House of Delegates a motion was made to abstain from supporting the Oklahoma College of Dentistry until verification had been made of the Oklahoma Dental Association's position. During its September 13 meeting, the board was provided with ODA's confirmation of support, and subsequently passed a motion to continue OSMA support for the University of Oklahoma College of Dentistry.

**Request For DO Membership**

During its September 13 meeting, the Board of Trustees discussed the Tulsa County Medical Society request to allow for osteopathic membership. At that time this topic was tabled until the 1988 House of Delegates meeting. However, during the February 7 board meeting, a motion was passed referring the DO membership topic to the Council on Planning and Development for a recommendation.

**"Supervised Medical Doctor" Designation**

During the November 15 meeting the board was given a report regarding the "SMD" by Mark R. Johnson, MD. Further comments were provided by Dean Donald G. Kassebaum, MD. Due to the vast amount of debate surrounding this new designation, it became clear that further discussion would be needed. It was later decided by Norman L. Dunitz, MD, Chairman of the Council on Planning and Development, that the "SMD" discussion would continue at the next council meeting.

**Board of Trustees Vice-Chairman**

The November 15 board meeting was Dr. Lanny Trotter's last meeting as Vice-Chairman. He expressed his



sincere appreciation to the board and the association for their support. Doctor Trotter now practices in the state of Georgia.

#### Funding of AMA Campaigns

The funding of AMA campaigns was discussed during the February 7 board meeting. Following discussion, the OSMA Board of Trustees voted its approval for continued funding for Oklahoma physicians wishing to campaign for office at the AMA level.

#### OU Merit Scholar Program

The February 7 board meeting was afforded with a presentation by Stephen M. Sutherland, PhD, Assistant Vice President of Student Affairs for Scholar Programs at the University of Oklahoma. Doctor Sutherland discussed the merit scholar program and noted that deans of the various colleges, with the exception of pre-med, support selected merit scholars with stipends. Doctor Sutherland requested the OSMA's financial support of \$1,000 for each merit scholar with a pre-medicine major.

It was stated that OSMA support of such a program would enhance the association's position as a supporter of quality education.

The board appreciated the presentation and, upon motion, requested that this item be forwarded to the Council on Medical Education for its recommendation.

#### Life Membership Awards

The following physicians have been awarded life membership in the Oklahoma State Medical Association through application from component societies, and with the approval of the association's Board of Trustees:

##### September 13, 1987

Reece R. Boone, Jr., MD, Watonga  
Francis P. Cauley, MD, Hooker  
David J. Chesler, MD,  
Oklahoma City  
Max A. Glaze, MD, Muskogee  
R. W. (Tex) Goen, Jr., MD, Tulsa  
Robert B. Howard, MD,  
Oklahoma City  
Joseph J. Maril, MD,  
Oklahoma City

##### November 15, 1987

Paul A. Bischoff, MD, Tulsa  
Antone C. Fina, MD, Atoka

Scott Hendren, MD,  
Oklahoma City  
Melvin C. Hicks, MD,  
Oklahoma City  
Coye M. McClure, MD,  
Oklahoma City  
William C. McCreight, MD,  
Oklahoma City  
Malcolm Mollison, MD, Altus  
Samuel T. Moore, MD,  
Oklahoma City  
J. W. Morrison, MD,  
Oklahoma City  
Edward R. Munnell, MD,  
Oklahoma City  
Donald H. Olson, MD, Vinita  
Jerome D. Shaffer, MD,  
Oklahoma City  
Hugh A. Stout, MD,  
Oklahoma City  
Lorance M. White, MD,  
Oklahoma City

##### February 7, 1988

James A. Cox, MD,  
Oklahoma City  
Nancy R. Craig, MD,  
Oklahoma City  
George C. dos Santos, MD,  
Henryetta  
Maurice C. Fuquay, MD, Tulsa  
Carl H. Guild, MD, Bartlesville  
Gene H. Harrison, MD, Tulsa  
Beryl D. Henwood, MD,  
Collinsville  
James H. Holman, MD, Altus  
Phyllis E. Jones, MD,  
Oklahoma City  
Neil B. Kimerer, MD,  
Oklahoma City  
Martin B. LeBeck, MD, Jenks  
Wesley T. Manning, MD,  
Pawhuska  
Elnora G. Miller, MD,  
Stillwater  
William S. Pugsley, MD,  
Oklahoma City  
Elmer Ridgeway, MD,  
Oklahoma City  
William J. Russum, MD,  
Bartlesville  
Hobart C. Sanders, MD, Boley  
John W. Walker, MD, Altus  
Henry D. Wolfe, MD, Hugo

Respectfully submitted,  
Jerry L. Puls, MD, Chairman  
OSMA Board of Trustees

## Supplemental Report of the BOARD OF TRUSTEES

Subject: Supplemental Report

Presented by: Jerry L. Puls, MD,  
Chairman

Referred to: Reference Committee I

Mr. Speaker and Members of the House:

The Board of Trustees met at its Annual Meeting yesterday May 5, at 1:30 PM, and this Supplemental Report reviews the actions taken by the Board at this meeting. This report will be referred to Reference Committee I to be considered along with the Annual Report of the Board of Trustees, which was included in the delegate handbook.

The Board approved the minutes of the February 7 meeting as presented.

Mrs. Julie Weedn, outgoing Auxiliary President, expressed her gratitude to the Board and the OSMA staff for their continuing support, and especially thanked Doctor Crosthwait.

Doctor Puls then introduced Dr. Ken Bailey, who reviewed the preliminary report of the recent survey sent to OSMA members. Doctor Bailey noted that the survey response was excellent — 1900 of 3800 surveys mailed have been returned. Doctor Bailey stated the final report will be prepared and circulated later, and answered questions from Board members.

Dr. M. Joe Crosthwait addressed the Board as outgoing President. He expressed his thanks for the opportunity to serve and represent the OSMA this year.

Doctor Crosthwait gave a brief report on the Executive Committee meeting held prior to the Board meeting, and noted the committee authorized OSMA's Executive Director to enter into a contract with the OFPR for computer services.

Doctor Crosthwait then expressed his best wishes to Dr. Ray V. McIntyre, OSMA President-Elect.

Dr. James D. Funnell, Secretary-Treasurer, cited OSMA's audit report prepared by Price Waterhouse and the 1988 Budget, and presented his report to the Board, which is included in the delegates handbook.

Doctor Funnell discussed two financial losses that occur each year, the Annual Meeting and the *Journal*, and

noted that the OSMA staff is already looking at ways to reduce costs in these areas.

Concerning the 1988 Budget, Doctor Funnell explained that the Board and House have reports and recommendations requesting full-time employment for the medical director of the Physicians Recovery Program. Mr.

Chief of the OSMA *Journal*. He noted that Doctor Johnson has held this position for 20 years. Doctor Johnson received a standing ovation from the Board of Trustees in thanks for his diligence in serving these past 20 years. Doctor Johnson expressed his thanks to the Board, staff and membership of OSMA. Doctor Puls then noted that

be reappointed to the Physician Manpower Training Commission.

Mr. Bickham then distributed a news release concerning the merger of the Oklahoma College of Osteopathic Medicine and Surgery with Oklahoma State University.

Mr. Bickham announced that Dr. Mark R. Johnson also plans to resign as Secretary-Treasurer of the Oklahoma State Board of Medical Licensure and Supervision, and distributed a roster of that Board's members. Mr. Bickham explained that OSMA needs to nominate three names to the Governor, and according to area distribution, the nominee should preferably be from the Oklahoma County area. The nominees received thus far in the OSMA office are: George R. Smith, Jr., MD, Cushing, and Ted Clemens, MD, Oklahoma City.

In other actions, the Board:

*Elected:* Dr. Jerry L. Puls, Tulsa, for another term as Chairman of the Board of Trustees, and Dr. Sara R. DePersio as Vice-Chairman of the Board;

*Nominated:*

William O. Coleman, MD, Oklahoma City; J. B. Eskridge III, MD, Oklahoma City; Eugene G. Feild, MD, Tulsa; and David M. Selby, MD, Enid, for re-election to the PLICO Board of Directors, and

*Nominated:*

Ronald S. Barlow, MD, Oklahoma City; Robert N. Cooke, MD, Oklahoma City; and Joe S. Hester, MD, Muskogee, to replace Ed E. Rice, MD, on the PLICO Board;

*Announced:* that Dr. George W. Prothro, Tulsa, was to receive the A. H. Robins Community Service Award; and that James Loy, Chickasha, was the recipient of the Donald J. Blair Friend of Medicine Award;

*Accepted for Business of the House:* a Report from the Ad Hoc Committee on Tenure of Office; a Report from the Ad Hoc Committee for Support of Physicians in Adverse Legal Actions; Late Resolution #16 — Yearly Physicals for Student Athletes; Late Resolution #17 — University of Oklahoma's Request for Funding; Late Resolution #18 — University of Oklahoma Clinical Faculty;

*Accepted for information:* Engrossed House Bill 1798;

*Approved the following special memberships:* 50-Year Pin, William M.



Nancy Guiden, AMA field representative, visits the OSMA House of Delegates with Rick Ernest, executive director of the Oklahoma County Medical Society.

Bickham noted that if the full-time position is approved, the Physicians Recovery Program should provide the Board with reports to account for its activities.

The Board then voted in favor of accepting the Secretary-Treasurer's Report.

Dr. M. Boyd Shook, President of the OFPR Board of Directors, announced that the OFPR's new Executive Director, Mr. Jim Williams, is doing a great job, and that he relates well with the physicians. Mr. Williams' interest is in education rather than punitive activities. Doctor Shook also noted that the PROMPTS reviews since last October have been graded at 100%. Regardless, Doctor Shook explained the OFPR contract will not be automatically renewed and will have to be rebid in competition with other bidders.

Doctor Puls announced that Dr. Mark R. Johnson plans to resign in August from the post of Editor-in-

the Board will consider the appointment of a new Editor-in-Chief at its August meeting.

Mr. Bickham then presented his Executive Director's Report. He first cited a letter from Mr. Bob Jones, Executive Director of Oklahoma Osteopathic Association, explaining OOA's position on DO membership in MD organizations (Resolution No. 12, Reference Committee I).

Mr. Bickham discussed the dispute between the auditors preparing OSMA (Price Waterhouse) and PLICO (Seidman and Seidman) audits. He recommended and the Board approve instructions to the auditors that provide for the separate audits of OSMA and PLICO, that the audits not be consolidated, and that whatever qualifying letters be approved so long as the financial integrity of OSMA or PLICO is not impugned.

The Board approved the recommendation that Dr. Billy Dotter, Okeene,



Haynes, MD, Henryetta; Dues Exemption, M. Karyl Stanton, MD, and Robert V. Weger, MD, both of Tulsa; Undue Hardship, George C. Moore, MD, and Paul Powell, MD, both of Ponca City; Life Membership, Jack Alexander, MD, Ponca City; Milton L. Berg, MD, Tulsa; P. D. Casper, MD, Del City; J. K. Farish, MD, Tulsa; George B. Gathers, Jr., MD, Stillwater; John D. Ingle, MD, Oklahoma

City; George R. Kennedy, MD, Virginia Beach, Virginia; LeRoy Long, MD, Oklahoma City; William D. Maril, MD, Oklahoma City; William A. Miller, MD, Homosassa, Florida; Gerald G. Robertson, MD, Edmond; Alexander Shadid, Sr., MD, Elk City; Jay T. Shurley, MD, Oklahoma City; Harold G. Sleeper, MD, Midwest City; James C. Walker, MD, Tulsa; and Rhonald A. Whiteneck, MD, Enid;

*Voted to support:* State dues of \$250 per year;

*Agreed:* to submit to the AMA a resolution objecting to the medical necessity determinations currently being applied by Medicare.

The Board adjourned at 4:30 PM.

Respectfully submitted,  
Jerry L. Puls, MD  
Chairman of the Board



From as far away as California and Massachusetts, the McIntyre clan gathers to see Ray V. McIntyre, MD, assume the OSMA presidency. Above, l to r, are the president's sister-in-law Catherine (Mrs John McIntyre), niece Joan (Mrs Dennis McIntyre), sons Dale and Floyd (holding a sleeping Floyd, Jr.), daughter-in-law Carolyn (Mrs Dale McIntyre), granddaughter Joyce (Floyd's daughter), mother Lula, wife Kathryn, daughter Ann Carol, Ray McIntyre, son Glen, brother John, and nephew Dennis.



Lula McIntyre, 94 years young, poses proudly with her two sons, John A. McIntyre, MD, OSMA president 1982-83, and Ray V. McIntyre, MD, OSMA president 1988-89.



Kathryn McIntyre has a winning smile for husband, Ray, as he prepares to assume the OSMA presidency.



## Report of the SECRETARY-TREASURER

Subject: **Annual Report**  
Presented by: James D. Funnell, MD  
Secretary-Treasurer  
Referred to: Reference Committee I

### Background

The OSMA's fiscal year begins on January 1 and closes on December 31.

The financial reports presented are for the calendar year 1987. Several years ago the House of Delegates authorized the Board of Trustees to continue funding OSMA programs at the currently approved levels until the new budget was approved in May. Hence, the budget presented covers expenditures from January 1, 1988 through December 31, 1988.

The association formed Physicians Liability Insurance Company in 1979, and since 1980 (the first year of

PLICO's operations), the financial condition of PLICO has been included in OSMA statements. The profit or loss of PLICO likewise has an impact on the profit or loss of OSMA. Price Waterhouse, formerly Moak, Hun-saker and Rouse, has audited the association's books for more than 20 years.

### The 1987 Audit

In 1986 the House of Delegates levied a \$600 assessment on all associ-

#### OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY CONSOLIDATED BALANCE SHEET

	December 31,	
	1987	1986 (Restated)
<b>Assets</b>		
<b>Current assets:</b>		
Cash	\$ 23,168	\$ 935,173
Savings accounts and certificates of deposit	849,651	269,499
Accounts receivable	634,159	1,009,501
Inventory	5,883	882
Prepaid expenses	9,284	6,725
Total current assets	1,522,145	2,221,780
<b>Property and equipment:</b>		
Land	7,808	7,808
Building	393,963	384,998
Furniture, fixtures and equipment	136,255	128,908
Equipment under capital lease	15,330	15,330
	553,356	537,044
Less—Accumulated depreciation	(96,621)	(77,254)
	456,735	459,790
Equity in unconsolidated subsidiary	4,146,018	4,054,197
<b>Other assets:</b>		
Due from reinsurance companies	—	370,000
Loan acquisition costs, net of amortization	2,964	3,403
	2,964	373,403
	<u>\$6,127,862</u>	<u>\$7,109,170</u>

#### OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY CONSOLIDATED STATEMENT OF REVENUES AND EXPENSES

	Years ended December 31,	
	1987	1986 (Restated)
<b>From operations:</b>		
Revenue	\$ 878,693	\$2,414,482
Expenses	675,268	976,660
Excess of revenue over expenses from operations	203,425	1,437,822
<b>JOURNAL:</b>		
Revenue	118,708	105,384
Expenses	185,476	176,251
Excess of expenses over revenue from JOURNAL	(66,768)	(70,867)
<b>Annual meeting:</b>		
Revenue	19,585	40,508
Expenses	75,081	90,718
Excess of expenses over revenue from annual meeting	(55,496)	(50,210)
Charge-off of reinsurance receivable, net	(217,500)	—
Excess (deficit) of revenues over expenses before other revenue (expenses)	(136,339)	1,316,745
<b>Other revenue (expenses):</b>		
Equity in loss of unconsolidated subsidiary	(61,551)	(595,238)
Excess (deficit) of revenues over expenses	<u>\$ (197,890)</u>	<u>\$ 721,507</u>

#### OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY CONSOLIDATED BALANCE SHEET

	December 31,	
	1987	1986 (Restated)
<b>Liabilities and Fund Balances</b>		
<b>Current liabilities:</b>		
Current portion of long-term debt	\$ 9,375	\$ 8,132
Accounts payable	102,754	847,753
Accrued income taxes	2,356	—
Deferred membership dues	655,345	659,685
Total current liabilities	769,830	1,515,570
Long-term debt	117,627	127,003
<b>Deferred revenue—</b>		
Assessments	346,051	390,649
Contributions	63,605	47,309
Fund balance	4,830,749	5,028,639
	<u>\$6,127,862</u>	<u>\$7,109,170</u>

#### OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY CONSOLIDATED SCHEDULE OF REVENUES

	Years ended December 31,	
	1987	1986 (Restated)
<b>From operations:</b>		
Membership dues	\$ 634,977	\$ 637,592
Special assessments	26,549	1,458,466
Interest and other	148,670	139,502
Building lease	28,900	28,800
Membership directory	31,175	27,059
Computer	8,422	123,063
Total revenue from operations	<u>\$ 878,693</u>	<u>\$2,414,482</u>
<b>From JOURNAL:</b>		
Subscriptions allocated from dues	\$ 31,792	\$ 31,431
Advertising and sales	86,916	73,953
Total revenue from JOURNAL	<u>\$118,708</u>	<u>\$105,384</u>
<b>From annual meeting:</b>		
Exhibit fees	\$ —	\$ 28,421
Contributions	2,450	300
Ticket sales	17,135	11,787
Total revenue from annual meeting	<u>\$ 19,585</u>	<u>\$ 40,508</u>

**OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF EXPENSES**

	Years ended December 31,	
	1987	1986
General membership expenses:		
Salaries	\$ 358,937	\$ 321,499
Awards	3,906	10,689
Councils	101,065	87,293
Data processing	20,953	28,982
Depreciation and amortization	19,806	74,426
Dues and subscriptions	4,957	5,055
Equipment rental and expense	22,640	32,427
In-state travel	128	2,340
Insurance	50,900	55,850
Interest	12,302	14,917
Legal and professional	15,200	15,010
Loss prevention project	45,099	49,968
Membership directory	17,752	18,471
Office supplies	26,748	23,898
OSMA newsletter	6,501	11,100
Out-of-state travel and AMA convention	73,646	70,776
Payroll taxes	27,654	24,219
Pension costs	7,780	27,099
Physicians recovery program	45,722	49,437
Postage and shipping	45,557	40,241
Repairs and maintenance	10,435	9,132
Services	3,643	6,035
Special projects	54,172	168,059
Staff and officers	44,716	36,761
Telephone and utilities	44,417	43,685
Loss on disposition of computer equipment	—	137,711
Other general expense	15,305	10,022
Total before allocation of overhead	1,079,941	1,375,102
Expense reimbursement from subsidiary	(325,000)	(325,000)
Overhead allocated to journal	(44,618)	(39,805)
Overhead allocated to annual meeting	(35,055)	(33,637)
Total general membership expenses	<u>\$ 675,268</u>	<u>\$ 976,660</u>
Council expenses:		
State governmental activities	\$ 66,856	\$ 59,617
Federal governmental activities	28,791	23,765
Medical education	192	(436)
Medical services	(262)	142
Member services	(11,832)	(16,646)
Planning and development	—	2,872
Professional and public relations	16,381	16,416
Public and mental health	939	1,194
Hospital medical staffs	—	369
Total council expenses	<u>\$ 101,065</u>	<u>\$ 87,293</u>

**OSMA PROPOSED BUDGET  
1988**

Revenues	
Dues	\$ 630,000
Interest & Commissions	125,000
Building Lease	28,900
Directory Sales	5,000
Dividends from Subsidiary	15,000
Contracts	355,000
Computer Sales	7,000
Total Revenue from Operations	<u>\$1,165,900</u>
Expenses	
General Administration	\$ 881,200
Council & Program	276,250
Journal (Net Loss after Applied Revenue)	25,000
Annual Meeting (Net Loss after Applied Revenue)	20,000
Total Expenses	<u>\$1,202,450</u>
Net Excess of Expenses over Revenue	<u>\$ (36,550)</u>

**OKLAHOMA STATE MEDICAL ASSOCIATION AND SUBSIDIARY  
CONSOLIDATED SCHEDULE OF EXPENSES**

	Years ended December 31,	
	1987	1986
Journal expenses:		
Salaries	\$ 36,000	\$ 36,000
Advertising	16,727	14,602
Artwork	3,678	3,551
Printing	73,945	70,236
Proofreading	1,086	1,088
Supplies and other	9,422	10,969
Total before allocation of overhead	140,858	136,446
Overhead allocated from general membership expenses	44,618	39,805
Total Journal expenses	<u>\$185,476</u>	<u>\$176,251</u>
Annual meeting expenses:		
Exhibit expense	\$ —	\$ 808
Travel	—	146
Special events	—	600
Printing	1,657	5,433
Entertainment	3,898	3,600
Luncheon	2,473	18,691
Signs and security	—	1,359
Audio visual equipment	3,383	2,951
Sports activities	—	700
Hotel	—	16,594
Other	4,112	6,199
Total before allocation of overhead	40,026	57,081
Overhead allocated from general membership expenses	35,055	33,637
Total annual meeting expenses	<u>\$ 75,081</u>	<u>\$ 90,718</u>

**OSMA PROPOSED BUDGET  
1988**

General Expense	
Salaries	\$ 375,000
Pension	10,000
Awards & Contributions	4,000
*Councils & Programs	276,250
Depreciation & Amortization	20,000
Dues & Subscriptions	5,000
In-State Travel	2,500
Insurance	45,000
Equipment Rental	30,000
Interest	12,500
Legal & Professional	15,000
Office Supplies	27,000
Out-of-State Travel & AMA Convention	75,000
Payroll Taxes	27,000
Postage & Shipping	50,000
Repairs & Maintenance	10,000
Services	5,000
Staff & Officers	45,000
Telephone & Utilities	45,000
Computer Supplies	15,000
Computer Maintenance	13,200
Risk Management/Loss Prevention	50,000
Total General Expense	<u>\$1,157,450</u>
*Council & Program Expense (included above)	
State Legislation	65,000
Governmental Activities	27,500
Medical Education	500
Medical Services	250
Member Services	500
Planning & Development	3,000
Professional & Public Relations	45,000
Public & Mental Health	1,000
Hospital Medical Staff	1,000
Resident Activities	1,000
Student Activities	8,500
Young Physician	3,000
Auxiliary Activities	8,000
Physician Recovery Program	107,000
AMA Delegates Expense	5,000
Total Council & Program Expenses	<u>\$ 276,250</u>

ation members insured with PLICO, and a policy fee of like amount on non-member insureds. The funds could be paid in two installments. \$150 of the assessment was to be retained by OSMA for tort reform activities, and \$450 was to be transferred to PLICO for increased capitalization. In both 1986 and 1987 OSMA showed higher than normal cash reserves and larger than normal liabilities because of these collections. The year-end audit takes into account the distribution of these funds and results in a decrease in both assets and liabilities by almost one million dollars. Other than the reflection of these transactions, there is nothing particularly different on the Consolidated Balance Sheet.

Revenues from OSMA's general operations were about as predicted, and before losses of PLICO are deducted,

the association realized a surplus over expenses of about \$80,000. However, a receivable (\$217,500) established a few years ago as a result of a contract with the Hartford Companies had to be written off because of unanticipated losses, and PLICO's '87 loss of \$61,551 leaves OSMA with a net loss of \$197,890.

It should be noted that deficits created by PLICO do not result in cash transfers for the depletion of OSMA reserves.

Overall expenses were less than projected; however, some areas exceed estimates. Office-related expenses, i.e., postage and shipping, telephone and utilities, travel, printing and office supplies all were higher than anticipated, but savings in other areas and increased revenue resulted in a net gain for OSMA, not considering the PLICO-related losses. OSMA's for-profit subsidiary, OSMA Member Services, Inc., realized a profit of about \$20,000 in 1987, but no allocated expenses have been charged against the company.

### 1988 Budget

The 1988 Proposed Budget anticipates no new program expenditures. All program activities have been held to 1987 levels or reduced, with the exception of the Physicians Recovery Program. The Board and House have reports and recommendations requesting full-time employment status for the medical director. This will more than double the '87 expenditure. The budget for '88 has been held to a minimum and staying within it will require judicious monitoring of expenditures.

The proposed budget does allow for a minor adjustment in salaries but no new positions or personnel.

### Summary

The House should recognize that the portion of the budget financed by dues has been decreasing over the past seven years. Contracts with PLICO, interest, commissions, assessments and outside income now represent almost one-half of the OSMA budget. This portends both good and bad — good in the sense that we as individual members don't have to pay more dues, but bad in the sense that our staff must devote time to non-physician activities to generate outside income. Our as-

sociation becomes "associated" with goods and services not always of a medical nature because their sales or use provides financial benefits to the association.

A review of state dues in our region reveals that OSMA has the lowest dues at \$210; Texas is next with \$235 (but they have 26,775 members); Colorado is high at \$555; and New Mexico is low (excluding Oklahoma) at \$250. There is no question that because of our unified status we have been able to keep dues down. The unity of Oklahoma physicians not only helps us financially, but also aids in our representation of physicians at every level of government and the private sector. Given the choice between a dues increase or a unified association, I'm sure any association member acting as Secretary-Treasurer would opt for unified membership. However, realistically, the House must face the financial reality that expenses do go up, and if we propose to expand programs as we inevitably do, such as the Physicians Recovery Program, then we must respond with increased revenue.

### Recommendations

1. That the House of Delegates accept the Audit Report prepared by Price Waterhouse.
2. That the Budget for 1988 be approved.

Respectfully submitted,  
James D. Funnell, MD  
Secretary-Treasurer

OKLAHOMA STATE MEDICAL ASSOCIATION  
AND SUBSIDIARY  
CONSOLIDATED  
FINANCIAL STATEMENTS  
AND ADDITIONAL INFORMATION  
DECEMBER 31, 1987 AND 1986

Price Waterhouse  
Colcord Building  
15 North Robinson  
Oklahoma City, OK 73102

April 1, 1988

To the House of Delegates of the  
Oklahoma State Medical Association

We have examined the consolidated balance sheet of Oklahoma State Medical Association ("Association") and its consolidated subsidiary as of December 31, 1987 and 1986 and the related consolidated statements of revenues and expenses, of changes in fund balance and of changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and, accordingly, included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances. We did not examine the financial statements of Physicians Liability Insurance Company ("Company"), a wholly-

### OSMA PROPOSED BUDGET 1988

<b>Journal</b>	
Revenue	\$ 120,000
Expense	145,000
Loss	(\$ 25,000)
<b>Annual Meeting</b>	
Revenue	\$ 40,000
Expense	60,000
Loss	(\$ 20,000)

### OKLAHOMA DUES COMPARISON

Oklahoma Dues	Other States
1988 - 210	Texas - 235
1986 - 210	Kansas - 320
1985 - 210	Colorado - 555
1984 - 210	Arkansas - 400
1983 - 210	Missouri - 300
1982 - 210	New Mexico - 250
1981 - 180	
1980 - 180	
1979 - 180	
1978 - 150	
1977 - 145	
1976 - 145	
1975 - 115	
1974 - \$20 dues increase	
1973 - ?	

### OKLAHOMA STATE MEDICAL ASSOCIATION MEMBERSHIP REPORT April 15, 1988

Regular Membership	3,191
Affiliate Members	9
Life Members	415
Junior (Residents & Students)	578
Hardship Members	0
	4,193
Pending Members	89
	4,282

There are 596 non-members listed on the OSMA Physician file.



04/15/88 County	OSMA MEMBERSHIP								Total
	Non-Member	Regular	Affiliate	Life	Resident	Pending	Hardship	Correspond.	
	1		3	6					10
ADAIR	2	6							8
ALFALFA		2							2
ATOKA	1	3		1					5
BEAVER		2							2
BECKHAM		22		1		1			24
BLAINE		7		2					9
BRYAN	1	16		2					19
CADDO	2	7		2					11
CANADIAN	7	22		5		1			35
CARTER	4	44		10					58
CHEROKEE	4	9		1		2			16
CHOCTAW	3	6		1					10
CIMARRON		2							2
CLEVELAND	31	120	1	14	5	4			175
COAL	1	2		2					5
COMANCHE	14	83		8		3			113
COTTON	1								1
CRAIG	10	7	1	2					20
CREEK	3	25		3		1			32
CUSTER	1	19		3					23
DELAWARE	1	10		1					12
DEWEY	1	2							3
EAST CENTRAL				1					1
ELLIS		5		2					7
GARFIELD	5	77		15	7	1			105
GARVIN	3	8		1					12
GRADY		44		2					46
GRANT		2							2
CREEK	2	7		1					10
HARMON	1	2							3
HARPER		3							3
HASKELL		1							1
HUGHES	2	4		1					7
JACKSON	8	16		6					30
JEFFERSON		3							3
JOHNSTON	2	4							6
KAY	2	55		8		1			66
KINGFISHER		5							5
KIOWA	1	6		1					8
LATIMER		3							3
LEFLORE	2	11		2					15
LINCOLN	2	3							5
LOGAN	2	10		3					15
LOVE		1		1					1
MAJOR		1							1
MARSHALL	1	4		1					6
MAYES	2	7		1					10
McCLAIN	1								1
McCLAIN		8		1					9
McCURTAIN	1	8		1					10
McINTOSH	1	4		2					7
MURRAY	1	5							6
MUSKOGEE	14	82		15		1			112
NOBLE	1	3			1		1		5
NORTHWEST		1							1
NOWATA	1	1							2
OKFUSKEE	2	2		2					6
OKLAHOMA	318	1,125	2	115	333	56			1,949
OKLAHOMA					1				1
OKMULGEE		20		4					24
OSAGE	1	5		1					7
OTTAWA	1	16		2					19
PAWNEE		3							3
PAYNE	2	59		12					73
PITTSBURG	9	37		7					53
PONTOTOC	5	34		5		1			45
POTTAWATOMIE	1	50		6					57
PUSHMATAHA	1	3		1					5
ROGER MILLS		2							2
ROGERS	13	12	1	2					28
SEMINOLE	3	10		2					15
SEQUOYAH	3	3							6
STEPHENS	4	34		3					41
TEXAS	2	5		2					9
TILLMAN		4							4
TULSA	80	866	1	105	225	17			1,294
WAGONER		4		1					5
WASHINGTON	4	67		13	6				90
WASHITA		1		1					2
WOODS	1	2							3
WOODWARD	3	13		2					13
TOTAL	596	3,191	9	415	578	89			4,878

owned unconsolidated subsidiary accounted for on the equity method of accounting. The investment in the Company represents 68% and 57% of the total consolidated assets of the Association for the years ended December 31, 1987 and 1986, respectively; for the years ended December 31, 1987 and 1986, the Association recorded losses of \$61,551 and \$595,238, respectively, on its investment in the Company. These statements were examined by other independent accountants whose report thereon has been furnished to us and our opinion expressed herein, insofar as it relates to the amounts included for the Company, is based solely upon the report of other independent accountants.

The Association does not provide for depreciation on buildings estimated at \$15,000 for 1987 and 1986 as required by generally accepted accounting principles.

In our opinion, except for not providing for depreciation as described in the preceding paragraph and based upon the report of other independent accountants referred to above, the consolidated financial statements examined by us present fairly the financial position of Oklahoma State Medical Association and its consolidated subsidiary at December 31, 1987 and 1986, the results of their operations and the changes in their financial position for the years then ended, in conformity with generally accepted accounting principles applied on a consistent basis after restatement for the change in the method of accounting for 1986 Tort Reform assessments as described in Note 2 to the financial statements.

Our examinations were made for the purpose of forming an opinion on the basic consolidated financial statements taken as a whole. The additional information is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the examinations of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

## Report of the COUNCIL ON PLANNING AND DEVELOPMENT

Subject: Annual Report

Presented by: Norman L. Dunitz,  
MD, Chairman

Referred to: Reference Committee I

### Introduction

The Council on Planning and Development is charged with the responsibility of studying and recommending long-range objectives for the OSMA and assessing and making recommendations regarding the resources and programs necessary to reach the objectives. Council membership consists of all of the OSMA's general officers, the delegates and alternate delegates to the AMA, and the chairmen of all other association councils and committees. This puts it in the position of having access to the best possible information for long range objective study.

In an effort to reduce expenses associated with holding two Council meetings each year, the Council, once again, decided to meet only once during 1988. The meeting took place on

February 19-20 and was held in Tulsa, Oklahoma.

### Council Discussion

As in the past, the Council on Planning and Development heard council reports from each of the OSMA Council Chairmen and staff. Specifically, each council was asked to report on



OSMA Executive Director David Bickham discusses accounting procedures with the Board of Trustees.

the numerous ways that each council has been responding to the needs of the OSMA members.

The Council on Planning and Development heard excellent reports encompassing council activities. This report will not duplicate the individual council reports, but rather shall report specific council recommendations for OSMA House of Delegates approval.

### Non-Medical Membership in OSMA

Theodore Brickner, MD, president-elect of Tulsa County Medical Society,

explained the osteopath request for membership in Tulsa County Medical Society and the Oklahoma State Medical Association. It was stated that Tulsa County is making every effort to build a strong relationship with the DO community. The Council discussed the non-medical doctor membership issue at length. Specific discussion included PLICO insurance and effect on rates as well as the possibility that the State Osteopathic Association would object to DO membership in the OSMA.

The Council on Planning and Development asked Executive Director David Bickham to contact Bob Jones, Executive Director of the Osteopathic Association and obtain his comments. The Council does not wish to strain the OSMA relationship with the DOs and, therefore, requests the OOA opinion on this issue.

### Supervised Medical Doctor

The Council on Planning and Development meeting created an ideal opportunity to arrive at a workable solution regarding unlicensed physicians in the state of Oklahoma. Mark Johnson, MD, Secretary of the Oklahoma State Board of Medical Licensure and Supervision, explained the reason for the "SMD" designation. He stated that it is necessary to identify to a patient that an attending physician is not licensed, as well as serving as a safeguard for that physician and for the supervising physician.

As Chairman of this Council, I asked for a meeting between the OSMA President, Joe Crosthwait, MD, Dr. Johnson and David Bickham to discuss this situation. Our deliberations, along with the Council's concurrence, provided the following comments.

1) This Council understands the arguments for recognizing an unlicensed physician.

2) The Council further recognizes the argument against requiring that an "S" be attached to an individual's Medical Doctorate designation.

Therefore, the Council on Planning and Development asked the Board of Medical Licensure and Supervision, as well as the OSMA, to meet via committee to arrive at a solution. The Council agrees that the words "Supervised," "Intern," or some other acceptable word should be used under the



unlicensed physician's name.

Following the Council's meeting, an Ad Hoc Committee on SMD was created to formulate a solution. The Council is appreciative of each participant's comments and we look forward to an amiable outcome.

### OSMA Annual Meeting

The Council on Planning and Development discussed the direction of future OSMA annual meetings. It was noted that only 18 other state associations conduct scientific programs in conjunction with their business during annual meetings. Following detailed discussions of locations and format of future OSMA Annual Meetings, the Council recommends adoption of the following:

1) Every third year, the OSMA Annual Meeting shall be held in a location other than Oklahoma City or Tulsa.

2) A scientific program shall no longer be a part of the OSMA Annual Meeting.

3) A separate scientific program should be held with supplier, scientific and pharmaceutical exhibits in the fall of each year. These meetings may include specialty society and alumni association annual meetings as well.

### OSMA Responsiveness to the Problems of the Physician

The Council discussed possible ways that the Oklahoma State Medical Association might be of greater service to its members. Following further discussion, it was agreed that the Tulsa physician members of this Council would ask the Tulsa County Medical Society Board for suggestions or recommendations regarding this matter.

### OSMA Financing of Campaigns

The Council has noted that \$5,000 is being set aside each year for OSMA members to utilize when running for AMA offices.

Following discussion, the Council on Planning and Development agrees that it is very important to have Oklahoma representation at the AMA level and that \$5,000 set aside each year is within reason.

Budget Request: \$3,000

Respectfully submitted.

Norman L. Dunitz, MD, Chairman  
Ronald Barlow, MD

Irwin H. Brown, MD  
Ed Calhoon, MD  
William Coleman, MD  
M. Joe Crosthwait, MD  
J. B. Eskridge III, MD  
Warren Filley, MD  
James Funnell, MD  
Michael Haugh, MD  
Mark R. Johnson, MD  
George Kamp, MD  
Perry A. Lambird, MD  
John McIntyre, MD  
Ray McIntyre, MD  
Robert Mahaffey, MD  
Floyd Miller, MD  
Robert Perryman, MD  
J. B. Pitts, MD  
Jerry Puls, MD  
Victor Robards, MD  
Gary Strebel, MD  
Orange Welborn, MD  
Robert W. Baker, OSMA Staff

## Report of the CONSTITUTION AND BYLAWS COMMITTEE

Subject: Annual Report

Presented by: James B. Eskridge III,  
MD, Chairman

Referred to: Reference Committee I

### Introduction

The Constitution and Bylaws Committee considers amendments proposed by members of the Association or by component societies and presents them with its recommendations to the House of Delegates for consideration. The Committee may originate amendments to the Constitution and/or Bylaws and submit them in like manner to the House of Delegates. If the Committee refuses to present a proposed amendment to the House of Delegates, it may be presented on the floor of the House by any Delegate. The Committee may be called on by the Board of Trustees to serve in an advisory capacity in any judicial hearings involving an interpretation of the Constitution and Bylaws.

### Review of Activities

Your Constitution and Bylaws Committee met by telephone conference call at noon on Tuesday, April 26, to consider and make recommendations regarding three resolutions that have been introduced into the 1988 OSMA

House of Delegates. The resolutions considered are as follows: Resolution #3, Voting Privileges for Medical School Deans; Resolution #12, Osteopathic Membership in OSMA; and Resolution #14, Deunification of AMA, OSMA, and State Societies.

The bylaws of the Association provide that any proposed amendment to the Constitution or Bylaws may be considered by the Constitution and Bylaws Committee. The Committee has the right to take four different actions: First, the Committee can submit amendments to the bylaws on its own; second, the Committee can recommend that an amendment be adopted as presented; third, the Committee can recommend that an amendment not be adopted; or, fourth, the Committee can take no position at all. In all instances where a Constitution and/or Bylaws amendment has been proposed, the Committee does prepare appropriate wording in the event the House of Delegates chooses to adopt the amendment.

### Resolution #3, Voting Privileges for Medical School Deans

This resolution would necessitate a constitutional amendment to grant voting privileges in the OSMA House of Delegates, automatically and without need of county election, to the deans or interim deans of each Oklahoma allopathic medical school. The makeup of the House of Delegates is controlled by the Association's constitution, not the bylaws.

In order to amend the constitution of the OSMA it is necessary for formal notice to be given to each component county medical society at least 60 days in advance of the annual meeting where the amendment is to be considered. Then it is necessary for the proposed amendment to be passed by a two-thirds majority vote of the House members present and voting.

The presentation of Resolution #3 is technically flawed in that it was not published 60 days prior to the meeting of the House of Delegates. Therefore, it is the recommendation of the Constitution and Bylaws Committee that the publication of the resolution in the 1988 Delegates' Handbook be considered 60 days notice and that the resolution might be re-introduced for formal consideration at the 1989 House of Delegates.



In the meantime, it is recommended that the Speaker of the House of Delegates might authorize the deans or interim deans of the allopathic medical schools of Oklahoma to actively participate in deliberations of the 1988 House of Delegates, through granting "privilege of the floor." (Bylaws, Chapter IV, Section 3.00-3.04).

#### **Resolution #12, Osteopathic Membership in OSMA**

The purpose of this resolution is to allow osteopathic physicians the right to seek membership in the Oklahoma State Medical Association and its component societies. In order to accomplish the purpose of Resolution #12, it would be necessary to amend the OSMA Bylaws as follows:

Chapter I, Section 1.00, the second full sentence should be amended to read as follows: "Except as otherwise provided, membership in a component society and in this association shall be granted only to residents of Oklahoma who are citizens or have filed a declaration of intent to become citizens of the United States, and to doctors of medicine or doctors of osteopathy who shall have received that degree from an educational institution approved by the Board of Trustees, and who are licensed by the Oklahoma State Board of Medical Examiners or the Oklahoma State Board of Osteopathic Examiners. (Underlined portions are new language.)"

Subsection 1.011 should be amended by adding the phrase "or doctor of osteopathy" immediately following the phrase "doctor of medicine" at the very first of the section.

Subsection 1.012 should be amended by adding the same phrase immediately following the phrase "Doctor of Medicine."

It would not be necessary to amend Chapter V outlining the responsibilities of the OSMA Board of Trustees, Subsection 7.036, dealing with the judicial appeals to the American Medical Association. If an osteopathic physician chose to join the OSMA under the current membership requirements, he/she would have to join the American Medical Association. This would bring him/her under the jurisdiction of the AMA's Judicial Council, now known as the Council on Ethical and Judicial Affairs.

The Constitution and Bylaws com-

mittee determined that it wishes to take no position on the adoption of this resolution and bylaws amendment.

#### **Resolution #14, Deunification of AMA, OSMA, and State Societies**

The purpose of this resolution appears to be a call for deunification, i.e., elimination of the requirement in OSMA Bylaws that all OSMA and



Sara R. DePersio, MD, Oklahoma City, has just been named vice-chair of the OSMA Board of Trustees.

component society members must also be members of the American Medical Association. The resolution never actually calls for deunification or an amendment to the association's bylaws, but that is clearly its intent.

The following amendments to the Association's bylaws would be required to accomplish deunification appropriately:

Chapter I, Section 1.00, of the OSMA Bylaws are hereby amended to delete the last complete sentence in the section.

Chapter II, Section 2.00, should be deleted in its entirety, except for the section number and title and the following wording inserted in its place: "Section 2.00 AMERICAN MEDICAL

ASSOCIATION DUES. Members of this association who elect to become members of the American Medical Association, shall pay AMA dues and assessments as levied for their appropriate classification of membership. AMA dues and assessments should be collected and remitted by component societies in like manner as state association dues and assessments."

Chapter V, Section 7.036 should be amended by inserting the words "involving AMA members" so that the first sentence in that section should read, "Judicial decisions of the Board of Trustees involving AMA members may be appealed to the Council on Ethical and Judicial Affairs of the American Medical Association in accordance with that organization's Constitution and Bylaws."

The Constitution and Bylaws Committee recommends that this resolution not be adopted.

Respectfully submitted,  
J. B. Eskridge III, MD,  
Chairman

Larry L. Long, MD, Vice-Chairman  
David Browning, Jr., MD  
Jerold D. Kethley, MD  
Arnold G. Nelson, MD  
J. B. Wallace, MD  
Ed Kelsay, Staff

### **Report of the PHYSICIANS LIABILITY INSURANCE COMPANY**

Referred to: Reference Committee I

When Physician's Liability Insurance Company was formed in 1979 the Board of Trustees of the OSMA charged the Board of PLICO with the responsibility for providing to Oklahoma physicians the broadest insurance coverage possible at the lowest reasonable cost commensurate with a sound insurance company.

Your Board concluded that to accomplish this end, we could not pay one penny for tribute. That we would have to follow the most conservative investment practices to protect the company's assets and we would have to buy reinsurance from the strongest reinsurers available.

After eight years of operation we are pleased to report that your Company

is in excellent financial condition. PLICO is recognized by the insurance industry and the medical community as a successful professional liability and accident and health carrier. Your professional liability insurance policy, as well as your accident and health policy, returns you more than a dollar of value for a dollar of premium paid because the investment income more than offsets the cost of operating the Company. Every penny of investment income is returned to the physicians of Oklahoma in the form of reduced premiums.

On behalf of the other members of the Board of PLICO, I would like to extend my thanks to the physicians of Oklahoma for helping us to make this possible. The strength of our Association and the loyalty of individual physicians has made it possible for our Company to succeed where some have failed. It is our united front that has protected PLICO from the inroads of commercial insurers which ultimately would divide our group, and as enrollment eroded, inevitably force our Company to withdraw from the market leaving us at less than the tender mercy of commercial insurers. These companies have demonstrated repeatedly in the past, they have not the slightest qualm about depriving physicians of necessary insurance coverage or of charging premiums. In Florida some specialties are charged as much as one-half million dollars a year.

PLICO is a creature of the Oklahoma State Medical Association. Your Board consists of 18 members, 17 are physicians, the 18th is the executive director of your Association. The President of your Association serves on the PLICO Board. Board members serve staggered terms, and four or five board members are elected every year by the OSMA House of Delegates during our annual meeting. The OSMA Board of Trustees and the PLICO Board work together. PLICO's President regularly reports to the OSMA Board of Trustees on the fiscal condition of the Company and its activities.

PLICO is audited annually by Seidman and Seidman, a national accounting firm with specialists in insurance company accounting, and PLICO is monitored by Milliman & Robertson, one of the most highly regarded actuarial firms, to assure that reserves and premiums are adequate to meet the needs of future risks.

### PLICO's Purpose

PLICO was formed exclusively to protect the physicians of Oklahoma in all their medically related activities. Your Board has not lost sight of this purpose. Oklahoma physicians share the risk of practice through PLICO and are therefore assured of a fair price equal to the actual cost of losses plus management cost, less invest-

deemed to be uninsurable. This Committee is necessary to protect the interest of the vast majority of Oklahoma physicians and their stake in their insurance company. The difference between the PLICO Underwriting Committee and that of a commercial insurer is that a PLICO insured is underwritten by his peers. Physicians pass judgment on physicians.



Gregory R. Istre, MD, chief of epidemiology at the Oklahoma State Department of Health, presents "AIDS Surveillance Update and HIV Reporting" as part of an AIDS panel discussion.

ment income. No where else can a physician secure insurance with the absolute assurance that the cost will never exceed what is absolutely fair. No where else can occurrence insurance be purchased with the high limits available through PLICO and the guarantee to the individual physician that through his Association, he participates in the formulation of the philosophy and policy of his insurance company.

### Underwriting

PLICO's goal is to treat every physician as fairly and equitably as possible. Until May of 1987 the underwriting was done by the OSMA Council on Member Services. During the '87 annual meeting the House of Delegates voted to transfer the responsibility to the PLICO Board. The PLICO Board then formed an Underwriting Committee. This committee bears the heavy responsibility of determining those physicians whose performance warrants review and those few who are

They must say to themselves, "There but for the grace of God, go I," and they are sympathetic to the demands and problems of their peers.

The PLICO Board directs the Underwriting Committee and accepts appeals from physicians who take umbrage with the decisions of the Underwriting Committee. The Underwriting Committee does not act in an inquisitory manner, but directly approaches a physician, who for one reason or another, has been brought to its attention. The PLICO Board and the Underwriting Committee understand that most Oklahoma physicians are qualified, conscientious practitioners. The Board and Committee realize as well that losses by their very nature are the reason for having an insurance company and they do not by themselves indicate a physician is irresponsible or guilty of substandard care. Sanctions are only considered appropriate against a physician who in the opinion of the Committee (a) has de-



viated from the acceptable and normal medical practice; (b) has been guilty of irresponsible behavior; (c) has rendered inferior or inadequate medical care; (d) has endeavored to practice beyond the limits of his training; (e) or who practices experimental or unusual medicine that carries with it special risks.

PLICO has charged this Committee with a paramount responsibility to respect the rights of the individual and to be as fair and equitable as possible in its deliberations, and as prudent and temperate as is reasonable in its use of sanctions and penalties.

### Loss Prevention

The purpose of the Loss Prevention Committee is to recognize high risk problem areas and to take measures to reduce those risks.

The Loss Prevention Seminars which are required for PLICO insureds are designed and sponsored by this Committee. Attendance at one of these seminars every three years is an underwriting requirement. During 1987 the Loss Prevention Committee held 10 seminars. Approximately 1,000 physicians or one-third of the insured population attended these seminars.

The Loss Prevention Committee also conducts studies of the claims experience to determine if problem areas exist. In the past, protocols have been adopted for procedures which have caused an unusually high number of claims or unusually large losses. In 1987 one of the areas studied involved fetal damage and stillborns. The study led to the realization that unexplained prenatal events frequently are the cause of fetal damage and that later may be incorrectly attributed to physician malpractice. Because of this the Loss Prevention Committee determined that pathological study of placentas could provide a strong defense in cases that are currently being lost. Guidelines were mailed to all physicians who deliver babies. The recommendation is that all placentas from normal deliveries be saved for one week. If the baby is normal at one week of age, the placenta is to be discarded. If the baby exhibits evidence of illness or damage it is recommended that the placenta be submitted to a pathologist and the results preserved so that adequate defense may be mounted against a future claim.

### Claims

The PLICO Claims Committee reviews all cases that come to PLICO. They decide whether a claim should be settled or tried and the authority resides in this Committee to approve or disapprove settlement authority and the amount authorized. This Committee provides medical input to the claims department of PLICO and to the defense attorneys.

Since the inception of PLICO through December 31, 1987 there have been a total of 3,126 claims reported, of which 1,039 were reserved. Of these, 591 have been paid. There were 923 suits pending as of December 31, 1987.

In 1987 the Claims Committee extended its activities to review the amount of disbursements for defense costs. A set of guidelines was established to be followed by PLICO's defense attorneys. These guidelines have reduced our legal costs while preserving the high quality of defense.

### Investments

The Investment Committee is charged with the responsibility of investing PLICO's reserves and capital and surplus. PLICO's Investment Committee employs the services of Drexel Burnham & Lambert and Brown Brothers Harriman and Company. The Committee sets a policy which makes its primary investments government bonds or high-quality (A rated or better) commercial bonds. As the reserves in the surplus and capital of PLICO have grown, earnings have grown as well. Since December 31, 1987 the Investment Committee has earned over \$19,938,000. During 1987 income was \$3,804,821. All of this money was used to pay the expenses of the Company and losses thereby reducing the cost of insurance to PLICO insureds.

### Audit and Finance

The Audit and Finance Committee of PLICO receives and reviews the annual audit of the insurance company from Seidman and Seidman, PLICO's public accounting firm. It presents the audit to the Board of PLICO.

The Committee is also charged with receipt and review of the Milliman & Robertson actuarial study which it presents to the Board for review and approval.

### PLICO Health

The PLICO Health Committee supervises PLICO Health. PLICO Health and Accident experienced an increase in enrollment during 1987. HMO and PPO insurance plans, as well as commercial insurance programs began demanding large increases in premium; some even closed their doors. PLICO is continuing to experience steady increases in enrollment as of the end of 1987.

Currently there are 2,667 PLICO Health policies in force for physicians and 4,523 policies for physician employees. As of December 31, 1987 this represented 17,505 individuals insured under the PLICO Health program.

The PLICO Board reluctantly voted a 20% rate increase which was effective October 1, 1987. The last rate increase prior to that was May 1, 1985. PLICO Health, like PLICO Professional Liability, is designed to operate as close to cost as possible.

During 1987 the program paid out \$11,071,886 in benefits to policyholders. Since its inception, PLICO Health, has paid a total of \$47,077,000 in claims.

### Tort Reform

It seems obvious to your PLICO Board after watching the steady growth in number and size of claims which has occurred year-in and year-out since your Company was formed, that Tort Reform is the only long-term solution to controlling professional liability insurance cost. The very best management can only contain and slow the inevitable growth in premiums.

The Oklahoma State Medical Association began a massive lobbying effort in 1987 for Senate Bill 183. This bill provided for a seven-year statute of limitations on minors and incompetents and makes those who bring frivolous suits responsible for "reasonable" court costs. It provides immunity for peer review activities and prohibits revealing the amount sought in a suit other than the minimum necessary to establish the court of jurisdiction. This bill was signed into law by Governor Bellmon. It helps in particular to limit the liability of a physician in peripheral areas of professional liability, but it does not constitute a long-term solution to the fundamental problems that drive insurance cost.



The OSMA continues its lobbying efforts to achieve elimination of these fundamental forces which are the doctrine of joint and several liability, as well as the evidentiary rules that prevent the defendant physician from introducing evidence that the plaintiff has collected compensation from other sources for an alleged loss. The lobbying efforts include a cap on non economic (pain and suffering) damages.

Changes in these aspects of the law could significantly affect future liabilities for Oklahoma physicians and we urge you to support your Association in striving for these changes.

**PHYSICIANS LIABILITY  
INSURANCE COMPANY  
BALANCE SHEET**

Year Ended December 31, 1987

<b>Assets</b>	
Cash and Invested Assets	\$42,437,369
Premium and Agent Balances in Course of Collection	138,646
Reinsurance Recoverable on Loss Payments	72,169
Interest Receivable	940,025
Note Receivable - OFPR	213,924
<b>TOTAL ASSETS</b>	<b>\$43,802,133</b>
<b>Liabilities</b>	
Unearned Premium	\$ 4,051,265
Losses and Loss Adjustment Expenses	35,519,003
Miscellaneous Accounts Payable	85,847
<b>TOTAL LIABILITIES</b>	<b>\$39,656,115</b>
<b>Capital</b>	
Common Stock	\$ 150,000
Additional Paid-In Capital	5,753,372
Retained Loss	( 1,757,354)
<b>TOTAL CAPITAL</b>	<b>\$ 4,146,018</b>
<b>TOTAL LIABILITIES AND CAPITAL</b>	<b>\$43,802,133</b>

**STATEMENT OF INCOME**  
Year Ended December 31, 1987

<b>Premiums</b>	
Direct Premium Written	\$34,221,486
Net Premium Written	\$36,029,412
Premiums Earned	\$36,029,412
<b>Expenses</b>	
Losses	\$28,241,620
Loss Adjustment Expenses	6,607,301
Other Underwriting Expenses	5,064,179
<b>TOTAL UNDERWRITING EXPENSES</b>	<b>\$39,913,100</b>
Underwriting Loss	\$(3,883,688)
Investment Income	3,822,137
Net Loss	\$ (61,551)
CAPITAL December 31, 1986	4,054,198
Surplus Contributions - 1987	153,371
CAPITAL December 31, 1987	\$ 4,146,018

## Report of the OKLAHOMA STATE MEDICAL ASSOCIATION AUXILIARY

Subject: **Annual Report**

Presented by: Mrs. Julie Weedn,  
President

Referred to: Reference Committee I

"PHYSICIAN PARTNERSHIPS . . . Working Together in Times of Change" has been your auxiliary's theme for 1987-88. While rapid technological advances in medicine have enhanced the quality and quantity of life, significant changes have taken place in the medical environment as well. Increasing medical costs, government intervention, litigation, competition, negative media and public health awareness are issues which must be addressed by the medical community. Your auxiliary has worked diligently this year to effect positive changes in our communities.

OSMA AUXILIARY FALL CONFLUENCE — "Stress and the Medical Marriage" was the topic of Fall Confluence '87 held at the Waterford Hotel in Oklahoma City. The effects of environmental changes on medical marriages were addressed in seminars such as "Sorting Out the Pieces: Stress and the Medical Marriage," "The Early Years and Parenting Small Children," "Teenagers, A Puzzling Time," and "Other Phases and Stages: Focus on Dual Career, Later Years, Balance and Burnout." The finale was Dr. Gordon Deckert's topic, "The Total Picture: Solving the Puzzle." While no one has all the answers, Doctor Deckert kept us in stitches as he presented the problems of medical marriages in stressful times . . . and perhaps the message did come through . . . we must have humor.

HEALTH PROJECTS — This year your auxiliary introduced a new state health project: "AIDS Education in Our Communities." Under the capable leadership of State Chairman Pat Minielly and her committee, pilot AIDS projects were launched in Tulsa. The AIDS Town Hall seminar (videotape available from OSMAA library) and the AIDS Poster Contest for high school artists are significant programs for the entire state to follow

next year. Coalitions formed with the Red Cross and the Oklahoma State Department of Health resulted in training sessions for auxiliaries and physicians to become active in the AIDS Speakers' Bureau. The foundation has been laid for future AIDS information to be disseminated into our communities through our county auxiliaries.

The OSMA and OSMAA worked together to provide a booth on AIDS Education during "Medicine Day at the Capitol." The AIDS Poster Contest entries were displayed, and AIDS literature was available. Dr. Greg Istre was present to answer any questions. Governor Bellmon awarded prizes to the AIDS Poster Contest winners in the House Chambers.

MEMBERSHIP — The most important aspect of maintaining an active membership is communication. There is no better way to communicate than in person. The county visits by the president and president-elect have become traditional because of their importance. Meeting and visiting with auxiliaries over the state and listening to their concerns not only helps to set mutual goals but demonstrates our commitment to reach goals together.

Strong leadership is essential in maintaining and stimulating membership participation. The AMA Auxiliary Leadership Training sessions held twice a year in Chicago provide education and information for potential auxiliary leaders as well as an avenue for personal growth. These national leadership sessions are outstanding . . . they can make Chiefs out of Indians! Not only does this training prepare one for auxiliary leadership opportunities, but the education received is beneficial in the general areas of personnel management, membership marketing, parliamentary procedure, finance, budgeting, communications, and legislation, to name a few.

AMA-ERF Christmas Sharing Cards, memorial donations, auctions, and fundraising events continue to fund future medical education and research. As of April 1, your State Auxiliary has sent over \$30,000 to AMA-ERF, and a silent auction of bountiful baskets and decorative gift bags is planned for our Annual Meeting in May.

LEGISLATION is one of the most

significant areas in which we can affect the future of medicine together. Our ability to communicate effectively with our legislators on medical bills being introduced at the state and national level is essential. We have proven that we can work very well together in legislative endeavors where numbers count a great deal.

"Medicine Day at the Capitol" is a successful example of how effective our partnership can be. An opportunity is provided for physicians and auxiliaries to meet, visit, and develop a rapport with their legislator as knowledgeable constituents. This year over 250 physicians, auxiliaries, and staff were in attendance at the March 9 event. Medical specialty societies set up exhibits in the Rotunda in addition to the OSMA/OSMAA AIDS Education Booth mentioned earlier.

Legislative commitment remains high in auxiliary as evidenced by OMPAC auxiliary membership of over 200 in the 1987 off-election year. The 1988 election year ahead will be additional incentive to raise this total even higher.

The OSMA/VIP PROGRAM is a wonderful example of how PHYSICIAN PARTNERSHIPS can work together to make positive changes in our communities. Your auxiliary has responded to the request to participate in the statewide VIP Program by serving on local VIP committees. Our "Sooner Physicians' Heartbeat" featured this important OSMA project in the Winter issue.

Your auxiliary appreciates the opportunity to serve as voting members on three OSMA committees: OMPAC-AMPAC, the Council on State Legislation, and the Council on Governmental Activities. We are also working with the OSMA on a new committee to provide litigation education to our medical families.

The support and assistance of your dedicated president, Doctor Crosthwait, your Board of Trustees, and the competent OSMA staff is very much appreciated by your auxiliary. Thank you for the opportunity to continue our work together to effect a positive future for medicine.

Respectfully submitted,  
Julie Weedn, President  
OSMA Auxiliary

## **Report of the OKLAHOMANS AGAINST LAWSUIT ABUSE COALITION**

Subject: **Annual Report**

Presented by: Lyle Kelsey, OALA

Executive Director

Referred to: Reference Committee I

### **Introduction**

In review, 1986 was the first coalition effort to secure some tort reform legislation. During that legislative session, the House and Senate were at odds over the contents of several tort reform bills that had been introduced. The end result of all the amendments was the passage of SB 488 which set a cap on punitive damages that cannot exceed the amount of actual damages awarded; it also made those who brought a federal lawsuit liable for up to \$10,000 of legal fees and court costs. SB 488 also required the Legislature to establish a Select Committee on Insurance Rates and Tort Claims to study the total liability issues within the state, prepare recommendations for amendment, enactment or repeal of certain statutes, and prepare legislation incorporating those recommendations.

In 1987, the coalition, along with the Oklahoma State Chamber of Commerce and Industry, went to the Legislature with a comprehensive tort reform bill, SB 134. This bill received a tremendous amount of lobbying during the session but was unsuccessful in having the bill pass out of the Senate Rules Committee. Upon learning the destiny of SB 134, SB 183 was felt to be the next best attempt to pass some type of tort reform during the 1987 Legislature.

SB 183 helped most professional organizations and specifically physicians. The bill provides a seven-year statute of limitations on minors and incompetents and also strengthens the responsibility for those bringing frivolous lawsuits to be responsible for reasonable court costs. The bill also provides immunity for peer review activities by various professional groups and eliminates the ad damnum clause, or prayer for damages, in petitions for more than \$10,000.

### **1988 Activities**

During the second session of the 41st Legislature, the coalition decided to approach tort reform from a different angle. Attempts were made with the author of SB 134 to develop a Committee Substitute Bill for 134 which would include key elements such as joint and several, collateral sources, cap on noneconomic damages, and structured settlements. While there was some interest on the part of the authors of SB 134 to try to move it in Rules Committee, the leadership of the Senate indicated that no tort reform would be passed during the 1988 legislative session. The Senate authors of SB 134 soon lost interest in any attempts to revive their bill. During that process, four separate bills were introduced in the Senate to try and see if any elements of tort reform could be passed during the session. The following is a list of the bills introduced:

**SB 565** — Sen. Howard Hendrick (Oklahoma City): Defines "products liability action" and establishes a defense for contributory negligence.

**SB 570** — Sen. Howard Hendrick (Oklahoma City): Further defines "Professional Review Body" for accountants, architects, professional engineers, etc.

**SB 584** — Sen. Howard Hendrick (Oklahoma City): Modifies the Joint and Several rule that if the plaintiff is 15% or more contributory to his injury, each defendant is liable for only his percentage of fault, but if the plaintiff is 15% or less contributory, each defendant is liable up to 15% over and above his percentage of fault.

**SB 606** — Sen. Mark Snyder (Edmond): Provides limitations on actions involving products liability and establishes a statute of limitations of 10 years.

**SB 607** — Sen. Gary Gardenhire (Norman): Authorizes the defendant to elect making monthly or structured payments on judgments exceeding \$100,000.

All five bills were assigned to the Senate Judiciary Committee. After numerous attempts by the Senate authors and coalition members, it be-



JANUARY 1988  
HOUSE OF REPRESENTATIVES  
EVALUATION  
Representative Term - 2 Years  
(All House seats are up for re-election in 1988 — every two years)

Representative	District	Tort Reform?	Lawyer?	Representative	District	Tort Reform?	Lawyer?	Representative	District	Tort Reform?	Lawyer?
Abbott, Lonnie D-Ada	25	Yes		Henshaw, Jim R-Tulsa	79	Yes		Roberts, Larry D-Miami	7	Yes	
Adair, Larry D-Stilwell	86	Yes		Hill, Walter R-Turpin	61	Yes		*Roberts, Walt D-McAlester	18	No	
Anderson, Don D-Tulsa	36	Yes		Hobson, Cal D-Lexington	45	Yes		Ross, Don D-Tulsa	73	No	
*Apple, Ed R-Duncan	50	Yes		Holden, A. C. D-Dewey	10	Yes		*Russell, Bert D-Watonga	59	?	
Barker, Jim D-Muskogee	13	Yes		Holt, James R-Ponca City	37	?		Sherrer, Gary D-Snow	19	Yes	
Bastin, Gary D-Del City	94	Yes		*Hudson, Sid D-Lawton	64	?		Smith, Bill D-Ringling	51	Yes	
Benson, Loyd D-Frederick	63	Yes	Yes	Hunter, Michael R-OKC	85	Yes	Yes	*Snider, George D-Shawnee	26	?	
Boeckman, Steve R-Dover	39	Yes		*Hutchcroft, Kevin D-OKC	89	No		Stacy, Gaylon R-Edmond	81	Yes	
Brewster, Bill D-Marietta	49	Yes		*Istook, Ernest R-OKC	100	No	Yes	*Steidley, Dwayne D-Claremore	9	No	Yes
*Bumpus, John R-Bethany	84	Yes		Johnson, Glen D-Okemah	24	No	Yes	Stottlmyer, Gary D-Tulsa	77	No	
*Campbell, Grover R-Owasso	75	?		Kamas, Lewis R-Freedom	58	Yes		*Sullivan, Leonard R-OKC	82	?	
Clark, Bill R-Tulsa	71	Yes		*Key, Charles R-OKC	90	Yes		Talley, Denver D-Chickasha	47	Yes	
*Coffee, Gary D-Coalgate	22	?		Koppel, Don R-Bartlesville	11	Yes		Thompson, Carolyn D-Norman	44	Yes	
Combs, Gene D-Collinsville	74	No	Yes	Larason, Linda D-OKC	88	Yes		Vanatta, Benny D-Sapulpa	30	Yes	
Converse, Kenneth D-Tishomingo	20	Yes		*Lassiter, John D-Moore	53	Yes		Vaughn, George D-Big Cabin	6	Yes	
Cotner, Howard D-Altus	52	Yes		Leftwich, Keith D-OKC	91	Yes		*Veitch, William R-Tulsa	69	?	
Cox, Kevin D-OKC	97	Yes		*Leist, M. C. D-Morris	15	?		*White, Vickie D-Norman	46	?	
Cozort, Wayne R-Tulsa	67	Yes		Lewis, Steve D-Shawnee	27	Yes	Yes	Widener, Bill D-Weatherford	57	Yes	
Craighead, David D-Midwest City	95	Yes		Littlefield, Rick D-Grove	5	Yes		Williams, Freddie D-OKC	99	Yes	
Davis, Frank R-Guthrie	31	No	Yes	Logan, Jay D-Tulsa	68	No		Williams, Penny D-Tulsa	70	Yes	
Davis, Guy D-Calera	21	Yes		Manar, Tom D-Apache	56	Yes		*Williamson, Richard R-Tulsa	76	No	
Duckett, Ross D-OKC	98	Yes		McCorkell, Don D-Tulsa	72	No	Yes	*Worthen, Robert R-OKC	87	?	
Duke, Don D-Ardmore	48	Yes		McKenna, Ken R-OKC	54	Yes		*Zimmerman, Jim D-Harrah	96	?	
Easley, Kevin D-Tulsa	23	Yes		McMillen, John R-Enid	41	Yes					
Ferguson, Larry R-Cleveland	35	Yes		*Medearis, Robert D-Tahlequah	4	Yes		*New Representatives from 1986 Elections			65 Yes 14 No 22 ? (No Clear Position Yet)
George, Danny D-Elk City	60	Yes		Mentzer, Don D-Sallisaw	2	Yes					
Gish, Larry D-Stillwater	34	Yes		Mitchell, Bill D-Lindsay	42	Yes					
*Glenn, Ron D-Heavener	17	?		Monks, John D-Muskogee	14	Yes		File for Office — Jul 11-13 Primary Election — Aug 23 Runoff (if necessary) — Sep 20 General Election — Nov 8			12 Attorneys
Glover, Jim D-Elgin	65	No		Morgan, Charlie D-Prague	32	Yes					
Gordon, Joe R-Broken Arrow	80	Yes		*Morgan, Jim D-Seminole	28	?					
Grieser, Emil D-Hobart	55	Yes		Morris, Mike R-Ripley	33	Yes					
*Gurley, Bill R-Depew	29	?		Murphy, Mike D-Idabel	1	Yes					
Hale, Harold D-El Reno	43	Yes		*Peltier, Wando Jo D-OKC	93	?					
Hamilton, James D-Poteau	3	Yes	Yes	Pitezal, Frank R-Tulsa	78	Yes					
*Hamilton, Jeff D-Midwest City	101	?		*Reese, Jim R-Deer Creek	38	?					
Harris, Ken D-Lawton	62	No	Yes	*Rhodes, Dusty D-Checotah	15	?					
Harris, Robert D-Wagoner	12	Yes		*Rice, Larry D-Pryor	8	?					
Heaton, Joe R-OKC	83	Yes	Yes	Rieger, Homer R-Enid	40	Yes					
*Henry, Claudette R-OKC	92	?		Roach, Russ D-Tulsa	66	?					



In conclusion, with 1988 as a presidential election year, a new Senate

sentatives in your area who favor tort reform and other similar issues. If we can make some changes in the composition of the Legislature, perhaps our efforts will be more successful for significant tort reform in 1989. Be sure and contact those legislators supporting tort reform and express your appreciation to them for their position, and especially those legislators who introduced tort legislation during this session.

J Okla State Med Assoc, Vol 81, July 1988 451



Edmund R. Becker, PhD, from the Harvard University School of Public Health, explains the resource based relative value scale at Friday's Keynote Luncheon.

## Reference Committee II

# REPORTS TO THE HOUSE OF DELEGATES

### Report of REFERENCE COMMITTEE II

Presented by: Donald R. Carter, MD,  
Chairman

Mr. Speaker and Members of the  
House of Delegates:

Reference Committee II gave careful  
consideration to the several items referred to it and submits the following  
report:

#### (1) Report of the President

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the President be filed for information.

Your Reference Committee would like to convey its most sincere gratitude and appreciation to M. Joe Crosthwait, MD, for his excellent leadership throughout this past year.

The Reference Committee and all Oklahoma physicians appreciate the time and diligence Doctor Crosthwait devoted to his presidency, particularly his work in establishing rapport with senior citizen groups in Oklahoma.

#### (2) Report of the President-Elect

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the President-Elect be filed for information.

The Members of the Reference Committee wish Ray V. McIntyre, MD, success as he begins his year as OSMA President and offer any support that he might find necessary during the course of the year.

#### (3) Report of the Council on Professional and Public Relations

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Council on Professional and Public Relations be adopted.

The Reference Committee would like to recognize the contributions made over the past twenty years by M. Joe Crosthwait, MD.

The Committee also would like to inform the House of Delegates that the Oklahoma State Medical Association film, *Preserving Tradition, Embracing Change*, which was produced by Doctor Crosthwait, was awarded a first-place prize by the American Society of Association Executives.

The Reference Committee would also encourage the Council on Professional and Public Relations to work to obtain greater distribution of the film.

#### (4) Report of the Council on Public and Mental Health

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Council on Public and Mental Health be adopted.

The Reference Committee would

like to commend Robert M. Mahaffey, MD, Chairman of the Council, for his work during the course of the past year.

The Committee also would commend Mary Anne McCaffree, MD, for her service as Chairman of the Council's Perinatal Task Force.

#### **(5) Report of the Council on Medical Education**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Council on Medical Education be adopted.

The Reference Committee further recommends that the OSMA contribute \$10,000 to the University of Oklahoma to encourage National Merit Scholars in pre-med to attend the University. The Committee was informed that the \$10,000 contribution by the OSMA will be matched by \$10,000 contributed by the Kerr-McGee Corporation.

The Committee recommends that this grant be on a one-year basis and be reviewed again next year. The Committee also realizes that in time other universities may solicit OSMA participation in similar programs which would be reviewed at that time.

#### **(6) Report of the Council on Medical Services**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Council on Medical Services be adopted.

The Reference Committee wishes to commend Ronald S. Barlow, MD, and the other members of the Council for their work during the past year.

#### **(7) Report of the Young Physicians Section**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Young Physicians Section be adopted.

The Reference Committee recommends that all county societies identify young physicians in their communities who could become involved in the Young Physicians Section.

#### **(8) Report of the Medical Students Section**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Medical Students Section be adopted.

#### **(9) Report of the Hospital Medical Staff Section**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Hospital Medical Staff Section be adopted.

The Reference Committee further recommends that the OSMA Board of Trustees study and make a recommendation at next year's Annual Meeting as to whether the Section should be continued.

#### **(10) Report of the Committee on Medical Ethics and Competency**

Because of the nature of the Committee's work, dealing with medical ethics and competency in complete confidence, there is no written report.

I would ask the Committee Chairman, James B. Pitts, MD, if he could provide a brief report on the Committee's purpose.

#### **(11) Report of the Task Force on AIDS**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Task Force on AIDS be adopted.

Your Reference Committee would like to commend Claudia Kamas for her diligence and hard work on this Committee.

#### **(12) Report of the Oklahoma Foundation for Peer Review**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Oklahoma Foundation for Peer Review be filed for information.

#### **(13) Report of the Journal of the Oklahoma State Medical Association**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that the Report of the Journal of the Oklahoma State Medical Association be filed for information.

Your Reference Committee wishes to commend Mark R. Johnson, MD,

for twenty years of distinguished, dedicated service to our *Journal*. Doctor Johnson is retiring as Editor of the *Journal*. He will be genuinely missed and it is safe to say he will be virtually impossible to replace.

Doctor Johnson mentioned in testimony before this Committee that there were many people responsible for producing a journal the quality of the OSMA *Journal*. Therefore, the Committee would like to recognize the hard work of Susan Harrison, Managing Editor of the *Journal*.

#### **(14) Resolution 1 — Peer Review**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 1 not be adopted.

The Reference Committee is sympathetic to the problems of a physician who has been sanctioned; however, the Committee also heard much testimony not only in favor of peer review, but also in favor of physicians conducting peer review.

#### **(15) Resolution 2 — Medicare Reimbursement**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 2 not be adopted.

During testimony it was reported that the principle of single-state reimbursement is already OSMA policy. The Committee endorses the concept but feels this resolution is moot.

#### **(16) Resolution 7 — Hemoglobinopathy Screening**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 7 be adopted.

#### **(17) Resolution 8 — Psychiatry Residency Training**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 8 be adopted.

#### **(18) Resolution 9 — Continuing Medical Education**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 9 be referred to the OSMA Board of Trustees for study and that the Board of Trustees report back



to the OSMA House of Delegates next year.

Your Reference Committee heard much testimony regarding various legislative initiatives to either mandate continuing medical education or require testing for physician re-licensure. The issue is an important one that deserves careful study before any action is taken.

#### **(19) Resolution 10—Prenatal Care and Funding**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 10 be adopted.

Testimony was overwhelmingly in favor of this resolution.

#### **(20) Resolution 14—Deunification of AMA, OSMA, and State Societies**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 14 not be adopted.

The Reference Committee heard overwhelming testimony in favor of continued unification; indeed, the Tulsa County Medical Society surveyed its membership about one year ago and the great majority of physicians voted to maintain unification. The Reference Committee unanimously supports the concept of unification and commends our OSMA AMA Delegates and Alternate Delegates.

#### **(21) Resolution 15—"Ten Commandments" of Peer Review**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 15 be adopted.

Your Reference Committee commends M. Boyd Shook, MD, for his work in making the Oklahoma Foundation for Peer Review a viable organization, more receptive to the concerns of Oklahoma physicians.

#### **(22) Resolution 16—Yearly Physicals for Student Athletes**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 16 be referred to the OSMA Board of Trustees for study by the appropriate committee of the OSMA and that the Board report back to the OSMA House of Dele-

gates at next year's Annual Meeting.

Mr. Speaker, your Reference Committee recommends adoption of the Report of Reference Committee II, as amended, as a whole.

Mr. Speaker, this concludes the Report of Reference Committee II. Your Reference Committee wishes to thank all who participated in the hearing and contributed to the preparation of this report.

Respectfully submitted,  
Donald R. Carter, MD,  
Chairman, Oklahoma City  
Scott W. Calhoon, MD,  
Oklahoma City  
Noble Ballard, MD, Altus  
Rebecca Goen Tisdal, MD  
Oklahoma City  
Robert Dix, MD, Lawton  
Mike Sulzycki, Staff  
Susan Meeks, Staff

### **Report of the COUNCIL ON PROFESSIONAL AND PUBLIC RELATIONS**

Subject: **Annual Report**

Presented by: Warren V. Filley, MD,  
Chairman

Referred to: Reference Committee II

#### **Introduction**

The Council on Professional and Public Relations is responsible for internal and external communications of the Oklahoma State Medical Association including maintaining understanding among physicians, patients and the public and keeping members informed about programs and policies of the Association.

#### **Review of Activities**

This was truly a year of change for the Council. After some twenty years as Chairman of the Council, M. Joe Crosthwait, MD, left the Council to assume the presidency of the OSMA. Dr. Crosthwait deserves sincere thanks and gratitude from his colleagues for his many years of service to the Council and for his dedication to presenting physicians and medicine in a positive fashion.

Warren V. Filley, MD, succeeded

Dr. Crosthwait as Chairman of the Council.

In order to determine the needs of Oklahoma physicians and subsequent direction of OSMA public relations activities, the Council commissioned Kenneth Bailey, PhD, Tulsa, operator of the Oklahoma poll, to survey Oklahoma physicians regarding attitudes, opinions, and needs from organized medicine. The survey will be available during the OSMA annual meeting.



New OSMA Auxiliary President Jan Storms, Chickasha, gets a congratulatory hug from husband, Bruce.

The Council will use the survey's final results to refine the Council's direction in the years ahead.

One project that became a responsibility for the council was the initiation of the Very Important Patient (VIP) program on a statewide basis. Nineteen county medical societies representing over 31 counties and well over half of the physicians in the state have agreed to implement the VIP program. The Council has produced thousands of brochures, VIP cards, decals, and applications. The Council will continue to work to implement the VIP program in every county in the state.

The Council added to its Medical Update series with the publication of a new pamphlet, "Let's Talk About AIDS."

# OKLAHOMA STATE MEDICAL ASSOCIATION QUESTIONNAIRE

PLEASE CIRCLE THE NUMBER WHICH BEST REPRESENTS YOUR RESPONSE FOR EACH QUESTION.

NOTE THAT THE NUMBERS ARE FOR COMPUTER CODING PURPOSES AND DO NOT REFLECT A VALUE OF THE RESPONSE.

1. How long have you been licensed to practice in Oklahoma?
 

Less than 1 year	1	11 to 20 years	4
1 to 5 years	2	More than 20 years	5
6 to 10 years	3		
2. Which of the following BEST fits the primary medical specialty from which you receive most of your medical income?
 

General Family practice	1	Internal Medicine	5
Surgery	2	Obstetrics/Gynecology	6
Pediatrics	3	Psychiatry	7
Dermatology	4	Other (SPECIFY) _____	
3. How old were you on your last birthday?
 

Less than 35	1	46 - 54 years	4
35 - 40 years	2	55 - 65 years	5
41 - 45 years	3	65 and over	6
4. In what community is your primary practice located? \_\_\_\_\_
5. Which of these BEST applies to your practice?
 

Independent Solo practice	1
Partner Group (2-5)	2
Large Group/Clinic (6 or more)	3

B. Are you compensated by:

Direct salary	1
Independent fee for services	2
Both	3
6. Please indicate the range which includes your net pre-tax income from your medical practice in 1987.
 

Less than \$30,000	1	\$75,001 - \$100,000	4
\$30,001 - \$50,000	2	Over \$100,000	5
\$50,001 - \$75,000	3		
7. Several issues are mentioned by doctors as the critical issues in health care and medicine here in Oklahoma. For each of the following issues, please indicate whether you consider it a **very important** issue, a **somewhat important** issue, or an issue of **minor importance** to you?
 

	Very Important	Somewhat Important	Minor Importance
A. Federal government involvement in medicine	1	2	3
B. The cost of medical care	1	2	3
C. Malpractice and the cost of malpractice insurance	1	2	3
D. The public image that doctors currently have	1	2	3
E. Distribution of doctors in all areas of the state	1	2	3
F. State government involvement in medicine	1	2	3
G. Threat of mandatory assignment	1	2	3
8. Considering all the problems and issues that presently confront health care, please RANK the three major problems facing medicine in Oklahoma today? (They need not be listed above)
 

1st: \_\_\_\_\_

2nd: \_\_\_\_\_

3rd: \_\_\_\_\_
9. Thinking about professional liability, how satisfied are you with current efforts in Oklahoma to reform the laws that govern professional liability claims, suits and awards?
 

Very satisfied	1
Somewhat satisfied	2
Not at all satisfied	3
10. In general, how aware are your patients of the issues related to the general crisis in liability insurance — are they . . . ?
 

Very aware	1
Somewhat aware	2
Not at all aware	3
11. Has the cost of professional liability insurance made you consider limiting or changing the scope of your practice?
 

YES	1	NO	2
-----	---	----	---
12. Are there areas in medicine you do not practice, even though you are qualified, because of rising malpractice insurance costs?
 

YES	1	NO	2
-----	---	----	---
13. Do you think the threat of malpractice suits causes you to do tests that you might otherwise believe are not needed?
 

YES	1	NO	2
-----	---	----	---
14. Please estimate what percentage of increase in the cost of your business was caused by rising professional liability insurance rates over the past few years. \_\_\_\_\_ %
15. Do you believe that the current amount of economic competition among physicians in your community is too high, about right, or too low?
 

Too high	1
About right	2
Too low	3
16. In your community, are there too many doctors, too few doctors, or about the right number of doctors?
 

Too many	1
About right	2
Too few	3
- 17A. Do you believe there is a current or impending surplus of physicians in certain specialty areas in your community?
 

YES	1
NO	2

B. IF YES: Which specialties are these? \_\_\_\_\_
18. During the past few years, has your patient load been increasing, decreasing, or has it remained about the same?
 

Increasing	1
Decreasing	2
About the same	3
19. Do you have a generally favorable or generally unfavorable opinion of HMOs?
 

Favorable	1
Unfavorable	2
- 20A. Are you currently affiliated with an HMO or PPO?
 

YES	1	NO	2
-----	---	----	---

B. IF YES: How many? \_\_\_\_\_
- C. IF YES: What percent of your patient caseload is directly attributed to your HMO or PPO participation?
 

Less than 25%	1
25-50%	2
51-75%	3
More than 75	4
- D. Are you planning to reduce your participation or association with any HMOs or PPOs?
 

YES	1	NO	2
-----	---	----	---
21. There has recently been a lot of discussion about different kinds of health insurance plans and how they reimburse physicians. Please RANK — 1 being the most preferred and 4 the least — the following three plans:
 

**Usual, customary and reasonable (UCR) plans** reimburse on the basis of complex and varied formulas and patients are billed for any remaining charges. \_\_\_\_\_

**Prepaid or HMO plans (Staff Model)** usually reimburse physicians on a salary and incentive basis. \_\_\_\_\_

**Group Model HMO plans** where physicians provide services in their own offices on a capitation basis. \_\_\_\_\_

**Indemnity plans** pay a fixed price for procedures and the physician then negotiates directly with the patient over any additional charges. \_\_\_\_\_
22. Some insurance plans contain provisions requiring or encouraging second opinions when a physician has recommended surgery for a patient. Do you favor or oppose such provisions?
 

Favor strongly	1
Favor	2
Oppose	3
Oppose strongly	4
23. Some insurance plans contain provisions requiring review by a third party — either pre-admission or retroactively — of a physician's recommendation to hospitalize a patient. Do you favor or oppose these types of provisions?
 

Favor strongly	1
Favor	2
Oppose	3
Oppose strongly	4

(continued)



The OSMA continued to work with radio station KTOK to produce monthly "Viewpoint" commentaries on medical issues. The commentaries are now offered by KTOK to radio stations on the Oklahoma News Network.

In addition, the Council continues to publish the OSMA News, contribute to the *Journal*, and work closely with members of the Oklahoma news media.

Two goals that remain unmet are

production of an OSMA membership brochure and activation of a Speakers Bureau.

Objectives for the coming year will be adjusted to reflect the results of the OSMA survey.

## OKLAHOMA STATE MEDICAL ASSOCIATION QUESTIONNAIRE (continued)

PLEASE CIRCLE THE NUMBER WHICH BEST REPRESENTS YOUR RESPONSE FOR EACH QUESTION.

NOTE THAT THE NUMBERS ARE FOR COMPUTER CODING PURPOSES AND DO NOT REFLECT A VALUE OF THE RESPONSE.

24. Following are some questions on the Physician-Patient relationship:

	More	About Same	Less
A. Difficult to manage clinically	1	2	3
B. Likely to follow prescribed treatment	1	2	3
C. Knowledgeable about health	1	2	3
D. Concerned about costs	1	2	3
E. Demanding of their physician	1	2	3
F. Satisfied with treatment process	1	2	3
G. Likely to sue	1	2	3
H. Seeking medical assistance earlier in the stage of the disease	1	2	3

25. Are patients generally more positive or generally more negative about their visits compared to three years ago?

Positive	1
Negative	2
Neutral	3

26. Do you feel that your control over patient treatment decisions in the hospital has increased, decreased, or remained about the same during the last several years?

Increased	1
Decreased	2
Remained same	3

27. Do you feel pressured or not to discharge patients early from the hospital?

Pressured	1
Not pressured	2

28. Some doctors are absolutely opposed to physician advertising, others say that as long as it is done in good taste they are not opposed to other doctors advertising. What about you?

Opposed	1
Not opposed	2

29. Please check which of the following are used by you or members of your group:

<input type="checkbox"/> Direct mail	<input type="checkbox"/> Listing - Yellow pages
<input type="checkbox"/> Television ads	<input type="checkbox"/> Display ad - Yellow pages
<input type="checkbox"/> Professional/medical directories	<input type="checkbox"/> Newspaper ads
<input type="checkbox"/> Invited talks/speeches	Other: _____

30. Still thinking about physician advertising, please indicate whether you agree or disagree with each of the following statements:

A. Advertising by doctors will lower their professional status.

Strongly agree 1

Agree 2

Disagree 3

Strongly disagree 4

B. Advertising will result in higher fees.

Strongly agree 1

Agree 2

Disagree 3

Strongly disagree 4

C. Advertising will help ordinary citizens make wiser decisions when selecting a doctor.

Strongly agree 1

Agree 2

Disagree 3

Strongly disagree 4

D. Existing information sources (e.g., yellow pages, referral services, directories) provide adequate information for the selection of a doctor.

Strongly agree 1

Agree 2

Disagree 3

Strongly disagree 4

E. Public confidence in the medical profession would be impaired by doctor advertising.

Strongly agree 1

Agree 2

Disagree 3

Strongly disagree 4

31. How satisfied are you with the current Medicare program in general?

Very satisfied	1
Somewhat satisfied	2
Not at all satisfied	3

32. How satisfied are you with the current Medicare payment levels?

Very satisfied	1
Somewhat satisfied	2
Not at all satisfied	3

33. What percent of your normal fee do you get from:

Medicare \_\_\_\_\_

Medicaid \_\_\_\_\_

34. In regard to Medicare, which of these best applies to you?

Participating Physician	1
Assignment case by case	2
No assignments	3

35. How would you rate the **quality** of medical care under Medicare available to those aged 65 and over as compared to the general population?

Better	1
About same	2
Worse	3

36. How would you rate the **availability** of medical care under Medicare available to those aged 65 and over as compared to the general population?

Better	1
About same	2
Worse	3

37. On a scale from 1 to 10, where "10" is excellent and "1" is poor, please rate each of the following:

POOR ----- EXCELLENT

A. OSMA's role in providing professional education	1	2	3	4	5	6	7	8	9	10
B. OSMA's role in providing business education	1	2	3	4	5	6	7	8	9	10
C. OSMA's representation of physicians before the state government	1	2	3	4	5	6	7	8	9	10

38. Using the same scale, please assign AN OVERALL RATING to each of the following as representatives of your needs:

POOR ----- EXCELLENT

A. American Medical Assoc.	1	2	3	4	5	6	7	8	9	10
B. Oklahoma State Medical Assoc.	1	2	3	4	5	6	7	8	9	10
C. County Medical Society	1	2	3	4	5	6	7	8	9	10
D. Medical Special Societies	1	2	3	4	5	6	7	8	9	10
E. Hospital Medical Staff	1	2	3	4	5	6	7	8	9	10

39. Do you favor or oppose a fall scientific meeting in addition to the regularly scheduled annual meeting of the OSMA?

Favor 1 Oppose 2

What recommendations do you have for the Oklahoma State Medical Association to better serve its membership?

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## Objectives

1. Continue to publish and explore upgrading quality of OSMA News.
2. Continue Medical Update Series as needed.
3. Produce OSMA Membership Brochure.
4. Initiate Speakers Bureau.
5. Continue KTOK Viewpoint Commentaries.
6. Distribute OSMA radio commentaries to state radio stations.
7. Continue implementation and support of VIP program.
8. Produce radio and television public service announcements as directed by Council.

## Budget:

Print OSMA News:	\$10,000.00
Produce Public Service Announcements:	10,000.00
Support VIP Program:	8,000.00
Produce Membership Brochure:	6,000.00
Produce and Distribute Radio Commentaries:	6,000.00
Produce Medical Updates:	2,000.00
Education and Dues:	3,000.00
TOTAL	\$45,000.00

Respectfully submitted,  
Warren V. Filley, MD, Chairman  
Howard A. Bennett, MD  
Burdge F. Green, MD  
Tim L. Grode, MD  
James C. King III, MD  
MS Mike Magee  
Mary Anne McCaffree, MD  
L. Sam Musallam, MD  
John W. Phillips, Jr., MD  
Lee E. Schoeffler, MD  
Michael R. Talley, MD  
Mrs. Jackque Tomsovic  
Mike Sulzycki, OSMA Staff

## Report of the COUNCIL ON PUBLIC AND MENTAL HEALTH

### Subject: Annual Report

Presented by: Robert M. Mahaffey,  
MD, Chairman

Referred to: Reference Committee II

### Introduction

It is the goal of the Council on Public and Mental Health to provide the citi-

zens of the State, as well as OSMA members, with timely information regarding the medical aspects of public health and to conduct and oversee needed programs in these areas.

### Review of Activities

The Council remains one of the OSMA's most active.



Organizing his notes in the House of Delegates is Ponca City pediatrician Ahmad S. Agha, MD.

The Council has worked closely this year with the Oklahoma State Department of Health. Specifically, the Council has helped inform members through the OSMA News and Journal regarding the importance of safe disposal of biomedical waste products.

The Council also works closely with the Oklahoma Departments of Health and Mental Health, the OU Department of Psychiatry, and the Oklahoma Psychiatry Association. The result of this cooperation is several resolutions introduced and supported by the Council recommending increased funding and support for psychiatric residency programs in Oklahoma and also resolutions mandating health insurance coverage for both inpatient and outpatient psychiatric care, alcohol and drug dependency programs.

The Council also endorses a resolution which would expand newborn screening to include all newborns for significant hemoglobinopathies.

The Council's Perinatal Task Force

and Ad Hoc Committee on AIDS were both very active this year.

As charged by the House of Delegates last May, the Perinatal Task Force, chaired by Mary Anne McCaffree, MD, has begun work to develop a comprehensive and uniform record for perinatal care and an appropriate statewide educational perinatal program. This activity will remain a

major priority for the Perinatal Task Force this year.

At the request of PLICO, the Perinatal Task Force researched and provided recommendations to PLICO for the establishment of a placenta registry in Oklahoma both for purposes of science and loss prevention.

The Perinatal Task Force also endorsed a resolution recommending all pregnant Oklahoma women receive prenatal care.

The Council's Ad Hoc Committee on AIDS also became active this year. Chaired by Ronald O. Gilcher, MD, Committee members are contributing monthly AIDS education articles to the Journal of the OSMA in an effort to educate Oklahoma physicians. The Committee will continue to work closely with the Oklahoma State Department of Health to determine ways to increase physician education regarding AIDS.

The Council's Maternal Mortality Committee meets as needed.

## Objectives

1. Interface with Oklahoma State Departments of Health and Mental Health; OU College of Public Health; OU College of Medicine; and Physician Manpower Training Commission.
2. Support Perinatal Task Force in development of uniform prenatal record.
3. Support Ad Hoc Committee on AIDS efforts to increase physician awareness.

## Budget Request:

Council Expenses	\$ 500.00
Committees (Perinatal, AIDS, Maternal Mortality)	500.00
<b>TOTAL</b>	<b>\$1,000.00</b>

Respectfully submitted,  
 Robert M. Mahaffey, MD, Chairman  
 Edgar M. Cleaver, MD  
 Gordon H. Deckert, MD  
 Sara R. DePersio, MD  
 Hayden H. Donahue, MD  
 John W. Drake, MD  
 Jodie L. Edge, MD  
 George B. Gathers, Jr., MD  
 William M. Harsha, MD  
 Jerry R. Hordinsky, MD  
 Gregory Istre, MD  
 Joe B. Jarman, MD  
 Bertha M. Levy, MD  
 Ken Mason, MS  
 John S. Muchmore, MD  
 Jerry R. Nida, MD  
 Edward K. Norfleet, MD  
 Mukesh T. Parekh, MD  
 George W. Prothro, MD  
 Ralph W. Richter, MD  
 Hal B. Vorse, MD  
 Larry G. Willis, MD  
 Mike Sulzycki, OSMA Staff

## Report of the COUNCIL ON MEDICAL EDUCATION

Subject: **Annual Report**  
 Presented by: Irwin H. Brown, MD,  
 Chairman  
 Referred to: Reference Committee II

## Introduction

The Council shall study and make recommendations related to all matters of maintaining or improving the level of competency of physicians in

Oklahoma, including but not limited to, maintaining liaison with other health professions or occupations to conducting continuing medical education programs in Oklahoma. It will also monitor continuing medical education standards as they may be required by Association policy. Financial aid to education shall also be among the duties of the Council.

The activities of the Council shall be governed by the Association's Annual Program of Activities as determined by the Board of Trustees.

## Review of Activities

An important activity of this Council is the surveying of institutions and organizations to provide Category I Continuing Medical Education. The Council continues its activities which meet those requirements as set forth by the national accrediting group, ACCME, the Accreditation Council on Continuing Medical Education.

Presently, the following institutions are accredited to produce Category I Continuing Medical Education offerings:

Baptist Medical Center,  
 Oklahoma City  
 Duncan Regional Hospital,  
 Duncan  
 Hillcrest Medical Center, Tulsa  
 Mercy Health Center,  
 Oklahoma City  
 Presbyterian Hospital,  
 Oklahoma City  
 South Community Hospital,  
 Oklahoma City  
 St. Anthony Hospital,  
 Oklahoma City  
 St. Francis Hospital, Tulsa  
 St. John Medical Center, Tulsa

Additionally, requests for survey applications have been sent to hospitals in Norman, Muskogee, Elk City, Enid, and Lawton. Stillwater Medical Center is scheduled for a survey "site-visit" on April 22, 1988.

## OU Merit Scholarship Program

The OSMA Board of Trustees was given a presentation by Stephen M. Sutherland, PhD, Assistant Vice President of Student Affairs for Scholars at the University of Oklahoma. Dr. Sutherland's presentation included a request for OSMA financial assistance to help fund scholarships for pre-med Merit Scholars attending Oklahoma University.

As one of the activities of the Council on Medical Education involves financial aid to education, the OSMA Board of Trustees referred this matter to our Council for a recommendation.

The Council on Medical Education has learned that deans of the various colleges, with the exception of premed, support selected scholars with stipends. Specifically, Dr. Sutherland is requesting a matching gift of \$10,000.00 on a yearly basis. The OSMA could approve their contribution for any number of years, i.e., one, two, etc.

The OSMA, along with the Council on Medical Education, understands the importance of quality education. The Council feels that its involvement in this Merit Scholar Program would not only enhance the OSMA's image, but also would be a major benefit towards the education of future medical doctors in the state of Oklahoma.

Because of this Council's scope and purpose, the Council recommends OSMA financial involvement in the Merit Scholar Program. The Council's only concern is that the request is for only one Oklahoma university. Therefore, the Council respectfully requests the Reference Committee's involvement with this decision.

Budget Request: \$500.00

Respectfully submitted,  
 Irwin H. Brown, MD, Chairman  
 John Alexander, MD  
 Robert T. Buchanan, MD  
 Daniel Cogan, EdD  
 Ward M. Hardin, MD  
 Donald G. Kassebaum, MD  
 Robert W. King, Jr., MD  
 Thomas N. Lynn, Jr., MD  
 Richard E. McDowell, MD  
 Harris J. Moreland, MD  
 B. Shushan Sharma, MD  
 Tim K. Smalley, MD  
 Edward J. Tomsovic, MD  
 Lesley L. Walls, MD  
 Robert W. Baker, III, Staff

## Report of the COUNCIL ON MEDICAL SERVICES

Subject: **Annual Report**  
 Presented by: Ronald S. Barlow, MD,  
 Chairman  
 Referred to: Reference Committee II



Introduction

The Council has been charged with the duty of making recommendations regarding health care delivery systems and reimbursement mechanisms as well as serving both the public and physicians by reviewing quality of care inquiries and fee complaints.



The youngest guests at the Inaugural are the president's grandchildren, Joyce and Floyd McIntyre.

Review of Activities

The Council meets as needed to review quality of care and fee issues. At any given time during the course of a year the Council will have four to six cases under review.

Numerous complaints regarding both fees and quality of care are handled on an informal basis by OSMA staff under the Council's direction.

The Vendor Drug Committee, which serves to advise the Oklahoma Depart-

ment of Human Services as to efficacious allocation of prescription medications to Medicaid patients, is another function of the Council.

Objectives

- 1. Continue quality of care reviews.
- 2. Continue fee reviews.
- 3. Support Vendor Drug Committee.
- 4. Increase activities in making recommendations in areas of health care delivery and financing.

Budget Request:  
Council Meeting Expenses: \$250.00

Respectfully submitted,  
Ronald S. Barlow, MD, Chairman  
John A. Blaschke, MD  
John R. Christiansen, MD  
Donald L. Cooper, MD  
Kurt Frantz, MD  
Jay A. Gregory, MD  
James P. Hutton, MD  
Bartis M. Kent, MD  
Vance McCollum, MS  
Ray V. McIntyre, MD  
John R. Perkins, MD  
Ed E. Rice, MD  
David J. Shepherd, Jr., MD  
Mike Sulzycki, OSMA Staff

Report of the  
YOUNG PHYSICIANS  
SECTION

Subject: Annual Report  
Presented by: Philip Mosca, MD,  
Chairman  
Referred to: Reference Committee II

Introduction

Recognizing the importance and involvement of young physicians in organized medicine, the American Medical Association, in June of 1986, created the AMA Young Physicians Section. Similarly, in May of 1987, the Oklahoma State Medical Association amended its Bylaws to create the OSMA Young Physicians Section.

Review of Activities

Presently, the OSMA Young Physicians Section is making every effort to build its membership and to identify the specific needs and interests of Oklahoma's young physicians. To do this, the OSMA Young Physicians Section will be conducting its own survey

to members under 40 years of age or who have been out of residency less than five years. A draft of the Young Physicians Section survey is attached to this report.

Although the OSMA Young Physicians Section is just beginning, our influence at the AMA level remains strong. Lee Newcomer, MD, serves as the AMA Young Physicians Section Alternate Delegate with Robert C. Wright, MD, and Gary Pohoretsky, MD, serving as the OSMA Delegate and Alternate Delegate to the AMA Young Physicians Section and Ward M. Hardin, MD, and Robert M. Gold, MD, Delegate and Alternate to the OSMA House.

Conclusions

The OSMA Young Physicians Section intends to increase its membership and thereby bring the views and interests of young physicians before the OSMA and AMA. The Section appreciates the support of the OSMA, and we urge all physicians under 40 to support the Section.

Budget Request: \$3,000.00

Respectfully submitted,  
Philip Mosca, MD, Chairman

OKLAHOMA STATE MEDICAL ASSOCIATION  
SURVEY OF YOUNG PHYSICIANS

1. Please list all the organizations in which you are a member:
- \_\_\_\_\_ a. Oklahoma State Medical Association
  - \_\_\_\_\_ b. American Medical Association
  - \_\_\_\_\_ c. County medical society  
If yes, which county society? \_\_\_\_\_
  - \_\_\_\_\_ d. Any specialty societies?  
If yes, please list them. \_\_\_\_\_
2. If you are a member of Oklahoma State Medical Association, why are you a member? (Please check all that apply).
- \_\_\_\_\_ a. OSMA services and seminars.
  - \_\_\_\_\_ b. I feel that OSMA addresses my needs as a physician
  - \_\_\_\_\_ c. To get PLICO insurance
  - \_\_\_\_\_ d. Habit
  - \_\_\_\_\_ e. It is the expected thing to do
  - \_\_\_\_\_ f. My employer or group pays the dues
  - \_\_\_\_\_ g. I want to be a member and feel that OSMA has a lot to offer
3. To the best of your knowledge, what are the dues to:
- Your County Medical Society \$ \_\_\_\_\_
- OSMA \$ \_\_\_\_\_
- AMA \$ \_\_\_\_\_

(continued)



4. In your opinion are any of these overpriced?  
 Your County Medical Society \_\_\_\_\_  
 OSMA \_\_\_\_\_  
 AMA \_\_\_\_\_
5. As a member of OSMA, do you feel that you have had ample opportunity to become involved in your county medical society?  
 Yes \_\_\_\_\_  
 No \_\_\_\_\_
6. As a member of OSMA, do you feel that you have had ample opportunity to become involved in OSMA?  
 Yes \_\_\_\_\_  
 No \_\_\_\_\_
7. Below are some objectives of the OSMA. Please specify whether you think each is important, somewhat important, somewhat unimportant, or not at all important.
- To promote professional contact between members
  - To guide legislative and political process to ensure quality health care
  - To provide continuing medical education
  - To promote better public understanding of medicine
  - To provide financial services to its members
  - To provide information to help physicians establish, market, and manage their practices
  - To represent physicians' interest with third party payors and other organizations
  - To provide expertise in contract negotiation with third parties
  - To provide assistance in filing insurance and government claims
8. Some physicians have said that the following trends have adversely affected them. How serious or not serious a problem is each of the following in your practice of medicine?
- Increased competition from other physicians for patients
  - Increased competition for patients from hospitals
  - Increased government regulation of medicine
  - Increased use of alternative health care systems such as PPOs, HMOs, etc
  - Increased use of allied health personnel for primary health care
  - Increased competition for patients from government health services such as Indian health service or health departments
  - Inability of patients to pay for medical care
  - Increased regulation of medical practice by private insurance companies
  - Increased cost of malpractice insurance
9. Please rank the following priorities in YOUR LIFE at the present time. Use 1 for most important and 9 for least important.
- Establishing and building your practice
  - Seeking a different type of employment
  - Completing the certification process
  - Being active in community affairs
  - Assuming a leadership role in organized medicine
  - Having financial security
  - Enjoying a balanced lifestyle with adequate free time
  - Accumulating assets
10. Rank in order from 1 (most important) to 8 (least important) what you feel the priorities of organized medicine should be today.
- Reducing government regulation
  - Resolving the professional liability situation
  - AIDS
  - Improving the public image of physicians
  - Decreasing the number of residency positions
  - Dealing with uncompensated health care
  - Advocating high quality care
  - Keeping physicians independent from limitations imposed by alternative delivery systems.
11. Age  
 a. Under 28  
 b. 28 - 31  
 c. 32 - 35  
 d. 36 - 39
12. Sex  
 a. Male  
 b. Female
13. Marital status  
 a. Single  
 b. Married; spouse also physician  
 c. Married; spouse employed in health care field  
 d. Married; spouse employed outside health care field  
 e. Married; spouse not employed outside home
14. Medical school location  
 a. Inside Oklahoma  
 b. Outside Oklahoma but within the U.S.  
 c. Outside the U.S.
15. Location of Residency  
 a. Inside Oklahoma  
 b. Outside Oklahoma but within the U.S.  
 c. Outside the U.S.
16. Type of practice  
 \_\_\_\_\_ a. Office based  
 \_\_\_\_\_ b. Hospital based  
 \_\_\_\_\_ c. Other \_\_\_\_\_  
 \_\_\_\_\_ d. Solo unincorporated  
 \_\_\_\_\_ e. Solo incorporated  
 \_\_\_\_\_ f. Group unincorporated  
 \_\_\_\_\_ g. Group incorporated
17. Income level  
 \_\_\_\_\_ a. \$ 0 - 25,000  
 \_\_\_\_\_ b. \$25,001 - 40,000  
 \_\_\_\_\_ c. \$40,001 - 60,000  
 \_\_\_\_\_ d. \$60,001 - 80,000  
 \_\_\_\_\_ e. \$80,001 - 100,000  
 \_\_\_\_\_ f. \$100,001 - 120,000  
 \_\_\_\_\_ g. \$120,001 - 150,000  
 \_\_\_\_\_ h. \$150,001 - 200,000  
 \_\_\_\_\_ i. More than \$200,001

## Report of the OSMA MEDICAL STUDENT SECTION

Subject: Annual Report  
 Presented by: Mike Sulzycki  
 Referred to: Reference Committee II

### Introduction

The Section consists of members from the OUHSC, OU Tulsa Medical College, and Oral Roberts University School of Medicine. The purpose of the Section is to introduce students to organized medicine and the issues that affect the practice of medicine.

### Review of Activities

The Section sponsors welcoming picnics for incoming medical students.

First-year students also may participate in Roundtable Luncheons which allow new students to discuss issues ranging from medical ethics to how to start a practice in an informal setting with practicing physicians.

Upperclass students may participate in Advanced Seminars which allow medical students to meet and exchange ideas with our state leaders such as Attorney General Robert Henry.

Student members also participate in OSMA Council activities.

This year students under their own initiative are beginning to implement speakers bureaus to provide AIDS information to school and youth groups and also another program to encourage high school and college students to consider careers in health care.

Budget request: \$8,500

## Report of the HOSPITAL MEDICAL STAFF SECTION

Subject: Annual Report  
 Presented by: William Coleman, MD,  
 Chairman  
 Referred to: Reference Committee II

During the opening session of the 1986 House of Delegates, the OSMA House passed an amendment to the OSMA Constitution allowing for the creation of the OSMA Hospital Medical Staff Section. The purpose of this Section is to provide a direct means whereby the Medical Association can address the relationship among members of the OSMA, hospital medical staffs, and hospitals.

Each hospital throughout Oklahoma is allowed to be represented by one medical doctor delegate to the OSMA HMSS. However, while membership in this section is very representative of Oklahoma hospitals, it has become increasingly difficult to assemble a quorum for the Section to meet. Special planning will be made to accommodate the Section members and we will pursue greater involvement in the coming months. On the national level, the OSMA Hospital Medical Staff Section is always represented during AMA HMSS meetings. However, for the section to continue, greater statewide involvement must be attained.

Budget Request: \$1,000.00

Respectfully submitted,  
 William Coleman, MD, Chairman

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## Report of the TASK FORCE ON AIDS

Subject: **Annual Report**  
Presented by: Claudia Kamas  
Referred to: Reference Committee II

The Oklahoma State Medical Association and the AIDS Ad Hoc Committee have initiated several projects toward educating the physicians and all health care providers. We have also been involved in some activities to make the general public aware of the facts about AIDS.

### A. AIDS Ad Hoc Committee

Dr. Ron Gilcher, Chairman

1. An AIDS article is appearing and shall continue to appear monthly in the *Journal*. Each article will be authored by a member of the Committee.

2. An AIDS brochure was developed by the Oklahoma State Medical Association, the State Health Department and the State Health Planning Commission to be made available for physicians' outer offices. The Health Planning Commission and the OSMA are jointly seeking funding for the printing of 1.5 million brochures to be mailed through the utilities billing. An important reason for this particular piece of literature to be sent, the statewide AIDS information number is listed.

3. The AIDS Ad Hoc Committee made policy recommendations to the Board of Trustees for consideration.

4. We are recruiting physician speakers to be trained by the AIDS Speakers Training Center in Tulsa. Dr. Gilcher sent a letter to all county society presidents and a request was made in the newsletter for physicians to take the lead in educating other physicians and the public. About 15 physicians have responded. A majority of these physicians, however, are from Tulsa and Oklahoma City. Our need lies in the rural areas.

5. The Committee will approve a clinician's manual assembled by medical students using other state societies' manuals as guidelines.

### Other AIDS Activities

1. Governor's Task Force — Final recommendations are being prepared to present to the Governor on April 21.

2. AIDS Network — We have re-

ceived close to 200 completed questionnaires from health care professionals, associations, hospitals and various other organizations. The questionnaire addresses their concerns, educational efforts made, what plans they have to educate further, list of conferences, and what organizations AIDS policies are, if any.



Winner of the Charlotte S. Leebron Memorial Trust Award this year is James R. Allen, MD, Tulsa. The award goes to the author of the best scientific paper published in the *Journal* during the preceding year.

3. AIDS Retreat, April 14 & 15 — Several individuals involved with various areas of health care met for a 24 hour retreat last month to write a plan for educating all health care providers about AIDS. This plan includes an organizational approach to educating physicians on AIDS.

### C. AIDS Legislation

*House Bill 1797* — An act relating to mental health, requiring approved treatment centers to provide human immunodeficiency virus infection education sessions; requiring such centers

to provide referral and assistance for testing for such virus;

*Signed by the Governor.*

*House Bill 1798* — An act relating to public health and safety; stating legislative intent; requiring certain confidentiality; providing for formulation of certain rules; providing exceptions to confidentiality requirement; providing for civil and criminal penalties; providing for actual damage, court costs and attorney's fees; prohibiting certain activity; providing for penalties;

*In Conference Committee.*

*House Bill 1910* — An act relating to public health and safety; requiring licensure of providers of certain laboratory services; requiring the State Department of Health to promulgate certain rules and regulations relating to such licensure; providing for codification; providing an operative date; and declaring an emergency;

*Senate for approval of amendments.*

*House Concurrent Resolution 1064* — A concurrent resolution encouraging and directing certain state and private entities to coordinate efforts relating to the human immunodeficiency virus infection; encouraging certain state agencies to increase testing, counseling programs and other services for patients with the human immunodeficiency virus infection; encouraging private entities to provide certain education about the human immunodeficiency virus infection; and directing distribution.

Respectfully submitted,  
Claudia Kamas  
Coordinator of Special  
Projects

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## Report of the OKLAHOMA FOUNDATION FOR PEER REVIEW, INC.

The Oklahoma Foundation for Peer Review, Inc. is currently in the developmental stages for the next PRO Scope of Work for the 1988-1991 contract period. Areas of interest to the Medical Association is the continued trend toward more educational interventions based on determined quality problems and, for the first time, the



review requirements extend to those services provided on an outpatient-ambulatory surgery basis and to the intervening care provided by the Skilled Nursing Facilities (SNFs) and Home Health Agencies (HHAs). There is also a greater emphasis on communications with the practitioners, providers, and beneficiaries. The decision has not been made at this time concerning the competitive bid vs. au-

tomatic renewal of the contract.

For your review, specific outcome reports are furnished to provide a comparative basis for the review results of the Oklahoma Foundation for Peer Review.

#### Attachments:

Review Universe Selected  
Review Results

## Report of the JOURNAL OF THE OKLAHOMA STATE MEDICAL ASSOCIATION

An Addendum to the Report of the  
Council on Professional and Public Relations

Subject: **Annual Report**

Presented by: Mark R. Johnson, MD,  
Editor-in-Chief

Referred to: Reference Committee II

### Introduction

The *Journal* of the Oklahoma State Medical Association has maintained its position as one of the nation's finest medical publications by providing its readers with timely, significant scientific articles and special feature stories. It continues to serve as an open forum for the exploration and discussion of issues vital to the physicians of Oklahoma and remains a very popular and important benefit of membership in the association.

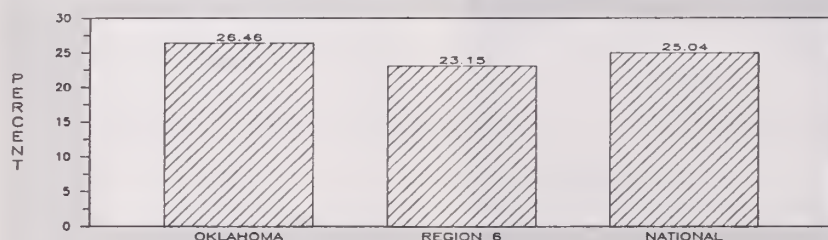
### Review of Activities

The *Journal's* circulation averaged 3,900 a month in 1987. Subscriptions continue to be available at just \$12.00 per year, and OSMA members are encouraged to remember the *Journal* when thinking of gifts for relatives and friends of medicine.

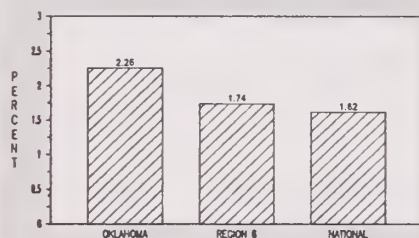
The *Journal* published twenty-four scientific manuscripts in 1987, as well as five other major articles, including the AMA Board of Trustees' Report YY on the prevention and control of AIDS. There were also 75 news stories, 18 book reviews, more than a dozen letters, and the complete proceedings of the 1987 OSMA Annual Meeting, not to mention monthly editorials from two OSMA presidents and the *Journal's* editor-in-chief. The OSMA Auxiliary published a monthly report, as did the State Department of Health, and countless short items appeared in *The Last Word*.

The Leaders in Medicine articles continue, focusing on state physicians who have made significant contributions to Oklahoma medicine and who, in the opinion of the Editorial Board, deserve to be recognized for their accomplishments. Featured during the last twelve months were Leo Lowbeer,

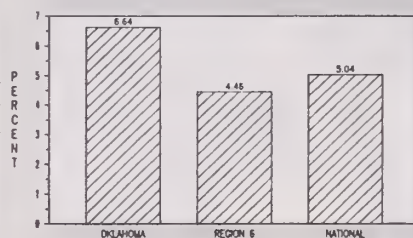
PERCENT OF UNIVERSE SELECTED FOR REVIEW  
FROM IMPLEMENTATION OF PRO 2nd CONTRACT THRU DEC 1987



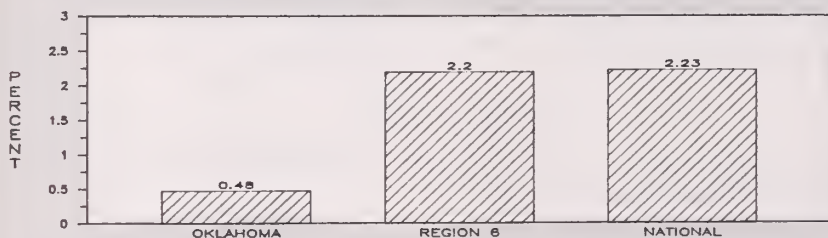
ACUTE CARE TRANSFERS



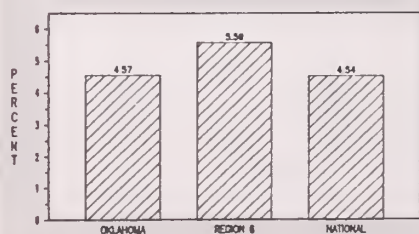
READMISSIONS



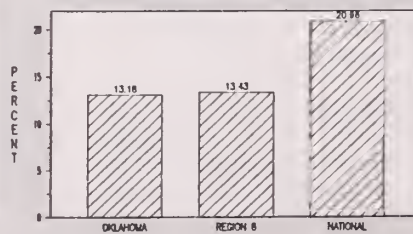
REVIEW RESULTS  
ADMISSION DENIALS



DRG ERRORS



GENERIC SCREEN FAILURES





MD (October 1987), and John W. Records, MD (March 1988).

The March 1988 issue also marked the beginning of a series of articles headed "AIDS Update," to be written monthly by members of the OSMA Ad Hoc Committee on AIDS or another expert in the field.

#### Charlotte S. Leebron Award

The Editorial Board has selected James R. Allen, MD, Tulsa, as the winner of the 1987 Charlotte S. Leebron Award. The \$500 Leebron Award, presented at the OSMA Annual Meeting, goes to the physician author(s) of the best scientific paper published in the *Journal* each year. Dr. Allen's winning paper, "Infantile Autism Reconsidered," appeared in the May 1987 *Journal*.

#### Advertising Rates

The Editorial Board has voted a 10% across-the-board increase in advertising rates, effective January 1, 1989, in order to offset an approximate 5% hike expected from the Transcript Press by the end of the year and to bring *Journal* rates more into line with the rates of other state medical journals.

#### Editor-In-Chief's Retirement

At the March 25 meeting of the Editorial Board, Editor-in-Chief Mark R. Johnson, MD, announced his intention to retire from the Board, effective August 1988. Dr. Johnson stated that he is nearing the end of his twentieth year as editor-in-chief and believes that, for a variety of reasons, it is time for him to step down.

#### Recommendation

For the second consecutive year, the Editorial Board has voted unanimously to recommend the addition of a second person to the *Journal's* in-house staff. This individual would pro-



Mark R. Johnson, MD, editor-in-chief, delivers his last *Journal* report to Annual Meeting delegates. Dr. Johnson has announced his retirement from the *Journal's* Editorial Board, effective next month.

vide urgently needed secretarial/clerical support and assistance for the managing editor and the Editorial Board and, time permitting, might also be called upon to assist other OSMA staff and Auxiliary members with their work. A proposed job description for this position is attached as a part of this report.

Respectfully submitted,  
Mark R. Johnson, MD, Editor-in-Chief

Harris D. Riley, Jr., MD, Editor  
Donald L. Brawner, MD, Editor  
Susan R. Harrison, Managing Editor

#### Job Description EDITORIAL ASSISTANT — OSMA JOURNAL

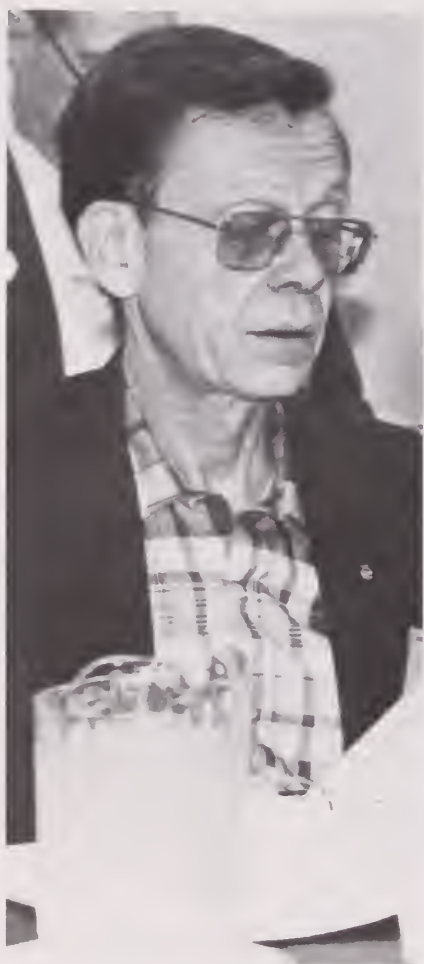
The *JOURNAL's* editorial assistant will provide in-house secretarial and/or clerical support for the managing editor and the Editorial Board. The editorial assistant will work with the managing editor in conducting the day-to-day operations of the *JOURNAL* and will report directly to the managing editor, the Editorial Board, and the OSMA executive director.

The responsibilities of the editorial assistant will include organization and maintenance of files, records, and schedules for manuscripts, book reviews, advertising, and subscriptions; general bookkeeping and billing for advertising and subscriptions; assorted copying, typing, and data entry; routine disposition of mail and telephone calls; monitoring and ordering of supplies; meeting and travel arrangements, etc. Duties may also include traffic management and quality control checks.

More specifically, the editorial assistant will:

- Assist the book review editor as needed by typing, maintaining files, etc.
- Establish and maintain manuscript files and records
- Assist in monitoring, scheduling, and directing production traffic
- Establish and maintain all files and records on advertisers
- Keep ledgers and do monthly billing for advertisers, non-member subscribers, and miscellaneous
- Maintain all files and records on non-member subscriptions
- Manage incoming mail and routine correspondence
- Handle routine phone calls
- Run copies as needed, assemble media kits and author packets, etc.
- Make all arrangements for Editorial Board meeting, take and transcribe minutes, etc.
- Keep track of supplies in office and reorder as needed

**QUALIFICATIONS FOR THIS POSITION:** A self-starter with excellent organizational skills. Ability to work reliably and independently. Good typing and clerical skills, with computer literacy a plus. Publishing/printing experience useful but not required. Some college preferred.



William S. Harrison, MD, Chickasha, reviews a council report.

## Reference Committee III

# REPORTS TO THE HOUSE OF DELEGATES

### Report of REFERENCE COMMITTEE III

Presented by: Boyd O. Whitlock, MD,  
Chairman

Mr Speaker and Members of the House of Delegates, Reference Committee III has carefully considered the items which were referred to it and submits the following report:

#### (1) Report of the Council on Governmental Activities

##### *Recommendation:*

Mr Speaker, your Reference Committee recommends that the Report of the Council on Governmental Activities be adopted.

Reference Committee III heard a council report summary regarding the Association's federal legislative activities. Council Chairman, Perry Lambird, MD, forwarded his appreciation to the members of his Council, as well as its Washington liaison, John Montgomery. It was noted that Congress is attempting to tackle a number of regulatory problems associated with the delivery of health care, and that the Council has kept weekly contact with Oklahoma's congressional delegation and their staffs in an all-out effort to represent the OSMA in Washington, D.C.

#### (2) Report of the Council on State Legislation

##### *Recommendation:*

Mr Speaker, your Reference Committee recommends that the Report of the Council on State Legislation be adopted.

Reference Committee III heard from Council Chairman, Larry L. Long, MD, regarding the Council on State Legislation's activities. Dr. Long noted that hundreds of issues have been discussed by the Council during the past year. Specific mention was made of the fine work done by David Bickham and Otie Ann Carr at the State Capitol. Specific legislative items were discussed and are contained in the Committee's House of Delegates Report. Reference Committee III wishes to commend the Council on State Legislation for their legislative efforts. Reference Committee III recognizes that the OSMA's success is also attributed to greater involvement by the OSMA membership and Auxiliary, and urges their continued participation.

#### (3) Report of the Council on Member Services

##### *Recommendation:*

Mr Speaker, your Reference Committee recommends that the Report of the Council on Member Services be adopted.



Reference Committee III heard comments from Council Chairman, William O. Coleman, MD, regarding the numerous activities of the Council. The Committee is appreciative of the Council's efforts on behalf of the OSMA membership. It was noted that this Council is producing a number of benefits that the membership finds useful. The Committee's only concern is one of a philosophical nature regarding the sponsorship of prepaid legal insurance and suggests the Council review its sponsorship of this program.

#### **(4) Report of the Ad Hoc Committee on Physician Legal Action Support**

##### *Recommendation:*

Mr. Speaker, your Reference Committee heard the Report of the Ad Hoc Committee on Physician Legal Action Support by Committee Chairman, Orange Welborn, MD. The Committee recommends approval of the Ad Hoc Committee report and, in addition, requests that the House of Delegates adopt the following: "That there be created a Physician Legal Action Support Committee and assign it to the OSMA Council on Member Services."

Reference Committee III is appreciative of Dr. Welborn's efforts and wishes to congratulate the members of the Ad Hoc Committee for the previous year's work.

#### **(5) Report on the Oklahoma Medical Political Action Committee**

##### *Recommendation:*

Mr Speaker, your Reference Committee recommends that the Report of the Oklahoma Medical Political Action Committee be filed.

Reference Committee III heard comments from Committee Chairman, Larry L. Long, MD, regarding the fundraising/membership activities of OMPAC. The Committee was notified that OMPAC is once again having a phenomenal year thanks to the increased support of the OSMA physicians and auxiliaries. Dr. Long commended the OMPAC staff for what appears to be another successful election year.

#### **(6) Report of the Physician Recovery Committee**

##### *Recommendation:*

Mr Speaker, your Reference Committee recommends that the Report of the Physician Recovery Committee be adopted.

Reference Committee III heard comments from the Medical Director of the Physician Recovery Committee, J. Darrel Smith, MD. Your Reference Committee is appreciative of the Committee's numerous successes, and believes that with a full-time Committee Medical Director, even greater services will be rendered to those professionals requiring the services of this committee.

#### **(7) Resolution 4 — Health Insurance Coverage for Medical Treatment of Mental Disorders**

##### **Resolution 5 — Health Insurance Coverage for Medical Treatment of Alcoholism, Drug Dependence and Mental Disorders**

##### **Resolution 6 — Health Insurance Coverage for Medical Treatment of Alcoholism, Drug Dependence and Mental Disorders**

##### *Recommendation:*

Reference Committee III discussed Resolutions 4, 5, and 6 together. The resolves asked for the mandating and support of additional or increased insurance coverage for medical treatment. The Committee is concerned with the increase in health insurance coverage primarily due to expenses incurred by such coverage. Although the Committee supports nondiscriminatory insurance coverage, this Committee cannot endorse or adopt additional insurance coverage on a mandatory basis. Therefore, your Reference Committee recommends the adoption of the following substitute resolution:

*Resolved*, that the question of increased health insurance coverage for medical treatment of mental disorders, alcoholism, and drug dependence be reviewed and studied by the Physicians Liability Insurance Company in an effort to derive an economical and proper solution.

#### **(8) Resolution 11 — Redress of Grievances Against Yellow Page Directory Companies**

##### *Recommendation:*

Mr. Speaker, your Reference Committee heard discussion regarding the problems surrounding yellow page telephone directories, specifically in

regard to practices deemed unprofessional by this Committee. Your Reference Committee concurs wholeheartedly with the intent of this Resolution, and believes that some action must be taken in defense of physician members wronged by directory companies. Because the Committee is not certain that legislation is the most appropriate



James D. Funnell, MD, Oklahoma City, will be serving a second term as OSMA's secretary-treasurer.

ate avenue for redress of this issue, your Reference Committee moves adoption of the following substitute resolution:

*Resolved*, that the President of the OSMA, Executive Director of the Association, as well as the Chairman of the Board of Trustees meet and decide the appropriate course of action.

#### **(9) Resolution 13 — Hydration and Nutrition Act**

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 13 be adopted.

The Committee discussed at length the Oklahoma State Legislature's actions surrounding HB 1189, known as the Hydration and Nutrition for In-



competent Patients Act. The Committee concurs with Resolution 13 and eagerly encourages legislative changes in HB 1189, which was passed in the 1987 legislative session.

#### (10) Resolution 17 — University of Oklahoma's Request for Funding

##### *Recommendation:*

Mr. Speaker, your Reference Committee recommends that Resolution 17 be adopted.

Reference Committee III discussed Resolution 17, and moved its adoption.

Mr. Speaker, Reference Committee III moves adoption of this report as a whole.

Mr. Speaker, as Chairman of this Reference Committee, I would like to thank the Committee members and the staff for their cooperation and their work on this report.

Respectfully submitted,  
Boyd O. Whitlock, MD,  
Tulsa, Chairman

Jon Axton, MD, Oklahoma City  
Stephen E. Trotter, MD, Shawnee  
Gary W. Rahe, MD, Oklahoma City  
Bonnie J. Ashing, MD, Tahlequah  
Richard L. Hromas, MD, Enid  
M. Boyd Shook, MD, Oklahoma City  
Robert W. Baker III, Staff  
Sandra F. Ruble, Staff

## Report of the COUNCIL ON GOVERNMENTAL ACTIVITIES

Subject: **Annual Report**

Presented by: Perry A. Lambird, MD,  
Chairman

Referred to: Reference Committee III

### Introduction

The Council shall review federal legislation and regulation of concern to the medical profession or the public health, and shall initiate activities or undertake appropriate responses on matters of priority interest. It shall also establish and maintain relations with federal government entities having statutory or regulatory jurisdiction affecting the medical profession, the delivery of health care, or the public health. In cooperation with other association councils and committees, it shall develop policy recommen-

dations for consideration by the Board of Trustees, and it shall prepare testimony and otherwise conduct the federal legislative program of the association.

### Washington Activities

As this report is being prepared, the



James V. Miller, MD, Ardmore, seems engrossed in his reading.

United States Congress has adjourned for the Easter recess and will reconvene on Monday, April 11. Following the recess, Congress will continue discussion on a number of items being studied by this Council. Items being studied by this Council are listed in the following paragraphs.

### Harvard/RVS

Under the study, initiated in January, 1986, Harvard is analyzing the resource costs of the services being provided by 17 major specialties and subspecialties that account for substantial Medicare reimbursement to physicians. Since then, Congress has ordered that it be extended to include

additional specialties. Harvard has submitted a grant proposal for the additional study, but it has not been formally approved.

The RVS study is to be delivered to the HHS Secretary on July 14th and subsequently must be forwarded to the Physician Payment Review Commission within 30 days. The Oklahoma State Medical Association will receive a copy of the study following receipt by the PPRC. It should be noted that it would be at least January of 1990 before Congress could implement any RVS payment mechanism. However, Congress is not certain as to whether or not it will opt for an RVS approach, although Congress is committed to changing the present reimbursement system.

### Medicare Denials/Refund Process

The AMA, along with the federation, has produced important due process dividends for physicians. Effective April 1, Medicare carriers, Aetna in Oklahoma, will be required to contact physicians to seek additional information *before* a claim is denied on "medically unnecessary" grounds and a refund is ordered. This change should weed out thousands of cases where refund letters were issued only to be reversed upon appeal after the physician supplies additional documentation.

### Catastrophic Legislation

In 1987, the United States House and Senate each passed legislation creating a catastrophic health care program for the elderly. It is expected that a Conference Committee will convene soon to iron out the differences between the two bills.

### Prescription Drug Activity

The AMA is cautioning the House Energy and Commerce Committee against permitting direct-to-the-consumer advertising of prescription drugs. In testimony before Congress, the AMA has argued that this type of advertising could confuse and mislead consumers and lead to demands or requests for medically unnecessary or inappropriate uses of drugs. The AMA has also argued that such advertising would compromise the physician-patient relationship. Presently, the pharmaceutical industry concurs with our arguments.

## FY-1989 Budget

On April 3rd, the Senate Budget Committee joined the House in rejecting the additional 1.2 billion in Medicare cuts that President Reagan proposed in his fiscal year 1989 budget. Presently, Congressional budget experts are expecting another big battle over the budget. The Administration's FY 89 budget proposes to achieve the 1.2 billion savings by cutting funding for indirect medical education and eliminating Medicare support for all but the salary related portions of direct medical education for hospital residents and interns.

Also due cuts are Medicare Part B payments for physicians, durable medical equipment, oxygen therapy, home dialysis, and other services. Half of these savings would be achieved by:

- (A) Reducing Medicare payments for certain surgical and medical services deemed overpriced,
- (B) Delaying the implementation of the RVS for radiologists and anesthesiologists, and,
- (C) Reducing payments to anesthesiologists and radiologists by 10%.

The AMA and OSMA are constantly asking the rationale behind these cuts, yet an answer is presently not clear. What is clear is that there is growing Administration and Hill efforts to divide our profession. This Council will, in conjunction with the AMA, make every effort to resist these changes.

## Capitol Hill Visits

Throughout the year, the OSMA sends a delegation to Washington, D.C., to lobby our Congressional Delegation on numerous issues. The Council is happy to report that our visits are very productive and that all Congressional Health Aides are acquainted with the OSMA's position on a regular basis.

Budget Request: \$27,500.00

Respectfully submitted,  
Perry A. Lambird, MD, Chairman  
Richard J. Boatsman, MD  
William D. Borkon, MD  
Ed L. Calhoon, MD  
Charles D. Cook, MD  
Raymond L. Cornelison, Jr., MD  
Jerome M. Dilling, Jr., MD

Norman L. Dunitz, MD  
Curtis E. Harris, MD  
Stanley Jett, MD  
Thomas A. Marberry, MD  
G. Lance Miller, MD  
Philip Mosca, MD, PhD  
George M. Pikler, MD  
Christian N. Ramsey, Jr., MD  
Ronald H. White, MD  
Larry L. Long, MD  
Jeannie Drake, Auxiliary  
Vaughn Dean Fuller, Auxiliary  
Nadine Nickeson, Auxiliary  
Sherry Strebel, Auxiliary  
Jacque Tomsovic, Auxiliary  
Julie Weedn, Auxiliary  
John Montgomery  
Robert W. Baker, OSMA Staff

## Report of the COUNCIL ON STATE LEGISLATION

Subject: **Annual Report**  
Presented by: Larry L. Long, MD,  
Chairman  
Referred to: Reference Committee III

### Introduction

The second session of the 41st Legislature is still in session at the writing of this report. Each session brings with it a certain amount of unique circumstances and situations that distinguish it from years past, and this session has been no exception. While there does not seem to be the confusion that was generated last session due to a new leader in the executive branch of government, there has developed an entrenchment along party lines that is making it more and more difficult to determine the outcome of significant legislative proposals.

### Review of Activities

The Oklahoma State Medical Association has had a very successful year at the State Capitol and that success has largely been due to the leadership in the House of Representatives and the State Senate. I am reminded of a quote made by Sir Winston Churchill during his tribute to the Royal Air Force during the Battle of Britain: "Never in the field of human conflict was so much owed by so many to so few." And so it has been with us. It would be easy to name the five or so representatives and senators who

stepped up and took care of us when it really mattered; they made our job look easy by aligning themselves with the physicians of Oklahoma. The impact of this kind of help resulted in controversial issues being stopped before they had the opportunity to become controversial. Below is an example of some of the legislation that our friends in the Legislature worked on to our benefit:

**HB 1840** The chiropractors introduced legislation that would allow them to prescribe and dispense drugs. This legislation was assigned to the House Public Health Committee. Three unsuccessful attempts were made to pass the bill out of committee. (A special thanks to all of the physicians who took the time to write their legislators regarding this issue. It made such a difference in our ability to defeat this bill. A job well done!) It is my understanding that this bill will be introduced next year with an attempt to garner pharmacist support by changing the language to allow chiropractors the ability to prescribe but not to dispense.

**SB 635** This bill, as it was introduced in its original form, would have had a devastating financial impact on PLICO. We did not become aware of this bill until it had passed the Senate. The introduced version would have disallowed a discounting procedure used by PLICO that would have resulted in the State Insurance Commission requiring PLICO to raise an additional 16 to 18 million dollars in capital. This capital would have been raised by an approximate 6000 dollar assessment to the physicians. Fortunately, we were able to explain the impact this kind of legislation would have on physicians in Oklahoma as well as to the financial well being of PLICO. The bill was assigned to the House Rules Committee. A compromise was reached between the Insurance Commissioner's office and PLICO that would, in effect, exempt PLICO from compliance with the statute. This bill is in conference committee as of the writing of this report, but agreements have been reached regarding the language. Whether this bill passes or not is of no concern to us . . . our only concern centers around PLICO being protected should this bill become law.

**HB 1487** This bill makes significant changes in the Oklahoma Board



## BILLS CARRIED OVER FROM 1987 SESSION

SB 18 Brown	<b>Requiring operators and front seat passengers of pickup trucks &amp; vans to wear safety seat belts.</b> OSMA Position: <i>Support</i>	House Comm. Rules	SB 162 Cain	<b>Modifying the composition of the State Board of Medical examiners to include five licensed physicians and three lay members.</b> OSMA Position: <i>Oppose</i>	Conference Committee: Cain, Riggs, Horner
SB 23 Taylor	<b>Expanding the purpose of the State Insurance Fund to provide reinsurance and insurance for certain lines other than Workers' Compensation.</b>	Senate Comm. Judiciary <i>Dead</i>	SB 165 Cullison	<b>"Physical Therapy Practice Act."</b> OSMA Position: <i>Support</i>	Senate on General Order <i>Dead</i>
SB 25 Stipe	<b>Designating the State Insurance Fund as the exclusive carrier of Workers' Compensation insurance in Oklahoma.</b>	Senate Comm. Judiciary <i>Dead</i>	SB 173 Hooper	<b>Providing that prior carriers of life, accident or health insurance policies are liable only to the extent of their accrued liabilities and extension of benefits.</b>	Signed by Governor 4/8/88
SB 70 Taliaferro	<b>Prohibiting the transfer of any impounded pets to any person for experimentation; making violation of this law a misdemeanor punishable by imprisonment in the county jail for not more than one year or by a fine of not more than \$3,000 or both.</b> OSMA Position: <i>Oppose</i>	House Comm. County and Mun. Govt <i>Dead</i>	SB 177 Haney	<b>Removing the requirement that nurse anesthetists must administer anesthesia under the supervision of and in the immediate presence of a licensed physician, osteopath or dentist.</b>	To Governor
SB 74 Cullison	<b>Increasing to 3/4 of 1% with a minimum of \$1,500 and a maximum of \$5,000 the application fee accompanying certificates of need required by the Okla. Health Planning Commission for the establishment of or change of services in a long-term care facility; increasing to \$5,000 license fees for HMOs; increasing to 3/4 of 1%, with a minimum of \$1,500 and a maximum of \$10,000 the application fee accompanying certificates of need required by the commission for establishment of or change of services in a health care facility.</b>	Senate Appropriations	SB 194 Taylor	<b>Requiring workers' compensation insurers to notify policyholders of rate increase requests and the time and place of any hearings to be held.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 93 Cullison	<b>Abolishing the Physician Manpower Training Commission.</b>	Senate Comm. Appropriations	SB 197 Wright	<b>Permitting fulltime employees of the Office of the Chief Medical Examiner to carry firearms for personal protection after an approved course of firearm training.</b>	Senate Comm. Crim. Juris. <i>Dead</i>
SB 106 Cullison	<b>Creating the "Oklahoma Indigent Health Care Access Act" prohibiting hospitals from denying emergency services to a person because of inability to pay or by reason of race, religion or national ancestry.</b> OSMA Position: <i>Monitor</i>	Senate for House amend- ments 7/17/87	SB 202 Roberts	<b>Requiring the state insurance commissioner to adopt regulations establishing reasonable standards for rating plans.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 110 Taylor	<b>Delaying the effective date of the cabinet system of government until July 1, 1989, or until no school district is subject to a reduction in state assistance from the previous fiscal year.</b>	Senate Comm. Appropriations	SB 203 Roberts	<b>Authorizing the state insurance commissioner to implement a joint underwriting plan if any type of property or casualty insurance is not adequately available.</b>	House Comm. Insurance <i>Dead</i>
SB 134 Hooper	<b>Providing that the payment of exemplary damages in tort actions shall be paid equally to the plaintiff and county and state general revenue funds creating the "Damages Limitation Act" removing joint liability in personal injury, wrongful death or property damage actions; setting a 2-year statute of limitations on products liability actions.</b> OSMA Position: <i>Actively Support</i>	Senate Comm. Rules	SB 204 Roberts	<b>Permitting financial institutions to own Oklahoma-licensed reinsurers and participate as underwriting members or investors in certain underwriting members of any insurance exchange.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 144 Green	<b>Requiring that contact lenses be prescribed only by a licensed practitioner.</b>	Senate Comm. Rules	SB 205 Roberts	<b>Setting conditions for insurers' cancellation of commercial risk, professional liability or public entity insurance policies.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 147 Stipe	<b>Creating the "Oklahoma State Liability Insurance Fund Act."</b>	Senate Comm. Judiciary <i>Dead</i>	SB 206 Roberts	<b>Requiring the state insurance commissioner to establish annual limitations upon rate increases or decreases taking effect without prior approval.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 155 Stipe	<b>Creating the "Drug-Free School Act."</b>	Senate Comm. Education <i>Dead</i>	SB 211 Smith	<b>Providing that the Board of Medical Examiners shall have the authority to adopt certain rules and regulations and set fees.</b>	Senate Comm. Hum. Resources <i>Dead</i>
SB 158 Brown	<b>Removing the requirement that municipalities must pay the \$100 medicolegal autopsy fee to the Office of the Chief Medical Examiner when a death or injury resulting in death occurs within the municipal boundaries.</b>	Senate Comm. General Govt. <i>Dead</i>	SB 213 Smith	<b>Providing that provisions relating to application of rate restrictions shall not apply to certain types of insurance.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
SB 160 McCune	<b>Expanding the Oklahoma Indigent Health Care Act to include provisions for primary health care services.</b>	Senate Comm. Hum. Resources <i>Dead</i>	SB 232 Brown	<b>Removing Butorphanol from the list of certain controlled dangerous substances.</b> OSMA Position: <i>Oppose</i>	Senate Comm. Hum. Resources <i>Dead</i>
SB 161 Cain	<b>Including in the definition of "unprofessional conduct" of medical practitioners the engagement in sexual conduct with a patient.</b>	Senate Comm. Bus. & Labor <i>Dead</i>	SB 249 Roberts	<b>Creating the "Physicians and Surgeons Professional Insurance Merit Rating Plan Act."</b>	Senate Comm. Bus. & Labor <i>Dead</i>
			SB 250 Roberts	<b>Creating the "Commercial Self-Insurance Act"; permitting any person or group to form a commercial self-insurance fund.</b>	Senate Comm. Bus. & Labor <i>Dead</i>
			SB 266 Taylor	<b>Renumbering subsections contained in 12 O.S. 1981, Sections 109 and 110, which place limitations on when and under what circumstances tort actions may be brought.</b>	Senate Comm. Judiciary <i>Dead</i>
			SB 268 Dennis	<b>Removing Butorphanol from the list of certain controlled dangerous substances.</b> OSMA Position: <i>Oppose</i>	Senate for House amend- ments 6/30/87

(continued)



of Nurse Licensure and Nursing Education. The introduced version would have phased out the Licensed Practical Nurse. We have opposed this bill since its introduction last session. Several attempts have been made by the Nurses Association to pass this bill out of the committee. The bill remains in the House Rules Committee.

**SB 177** This bill was introduced last session by the CRNAs to allow them to administer anesthesia without the presence of a physician. We aggressively opposed this legislation. The bill was assigned to the Senate Business and Labor Committee where the Chairman, Senator Ben Brown, refused to hear the bill. During the 1987 interim, meetings occurred between the State Medical Association, the Hospital Association, the Nurses Association, the CRNAs, the anesthesiologists, and PLICO's attorneys. After a process that is too difficult and lengthy to explain here, compromise language was agreed upon. The language reads as follows:

Certified Registered Nurse  
Anesthetist "... adminis-

ters anesthesia under the supervision of a medical doctor, osteopathic physician or dentist licensed in this state, and under conditions in which timely on-site consultation by such practitioners is available . . ."

The bill has passed both Houses and is awaiting the Governor's signature.

**SB 599** This bill was introduced at the request of the Governor's office with the intent being to begin the process of consolidating professional and occupational licensing boards. The bill was introduced as a shell bill to meet the deadline to introduce bills; however, once copies of the language to be inserted in committee were distributed, we realized the problems we were going to have with the Governor on the issue of our Board's autonomy. Once again, we strongly opposed this bill. It was assigned to the Senate Business and Labor Committee where Senator Ben Brown refused to hear the bill in committee. Our feelings of a victory were short-lived, however, because it became painfully clear that

the Governor was not going to give up on this issue. To date, he has vetoed all of the sunset legislation that would recreate occupational licensing boards. He has vetoed the Oklahoma State Board of Licensed Social Workers, the State Board of Veterinary Medical Examiners, and the Anatomical Board of the State of Oklahoma. His veto message indicates that he plans on taking all of the boards and absorbing them into four state agencies: the Department of Health, the Department of Public Safety, the Department of Labor, and the Secretary of State's office. It is his plan to combine the Medical Board with some 20 other health related agencies, including chiropractors, social workers, optometrists, hearing aid fitters, osteopaths, psychologists, et al. We have been very frustrated by the Governor's actions because, to date, no one in his office has ever requested a meeting with us to even attempt to inform us or ask for our input as to how a proposal such as this would work. What is even more frustrating is our inability to understand the rationale behind such a pro-

#### BILLS CARRIED OVER FROM 1987 SESSION (continued)

<b>SB 293</b> Taylor	<b>Creating the "Oklahoma Liability Reinsurance Facility Act."</b>	Senate Comm. Bus. & Labor <i>Dead</i>	<b>HB 1010</b> Riggs	<b>Increasing allowable cost for medical records from 10 cents to a maximum of 50 cents per page not including postage if requested by mail.</b> OSMA Position: <i>Support</i>	Senate Comm. Judiciary <i>Dead</i>
<b>SB 295</b> Taylor	<b>Removing the requirement that actions for damages for death against any health care provider shall be brought within two years of the date the plaintiff knew of the existence of the death.</b>	Senate for House amend- ments (6/16/87)	<b>HB 1011</b> Bastin	<b>Requiring triplicate prescription forms for certain types of controlled dangerous substances.</b> OSMA Position: <i>Monitor</i>	House Comm. Public Health <i>Dead</i>
<b>SB 300</b> Cain	<b>Providing that medical examiner death certificates will not be required in cases investigated solely for the purpose of issuing a permit for transport of a body out of state.</b>	House for Conference Committee Report (5/20/87)	<b>HB 1013</b> Bastin	<b>Providing that sentencing for violations relating to certain controlled dangerous substances shall not be subject to suspended sentences.</b> OSMA Position: <i>Monitor</i>	Senate Comm. Crim. Juris. <i>Dead</i>
<b>SB 301</b> Miles- LaGrange	<b>Creating the "Adolescent Drug and Alcohol Abuse Education &amp; Prevention Program and Council."</b>	Senate Comm. Education <i>Dead</i>	<b>HB 1056</b> Lewis	<b>Exempting contracts of the State Employees Group Insurance Board and qualified health maintenance organizations from competitive bidding procedures.</b>	Senate Comm. Appropriations
<b>SB 306</b> Hooper	<b>Placing in the Public Health &amp; Safety Laws the "Oklahoma Alcohol and Drug Abuse Services Act."</b>	Senate Comm. Bus. & Labor <i>Dead</i>	<b>HB 1059</b> Abbott	<b>Providing for participation in the Education Employees Group Health, Dental and Life Insurance Act by employees of vocational and technical school districts and the Oklahoma State System of Higher Education.</b>	House Comm. Retirement <i>Dead</i>
<b>SB 350</b> Hendrick	<b>Creating the "Health Care Provider Malpractice Liability Act."</b>	Senate Comm. Judiciary <i>Dead</i>	<b>HB 1060</b> Heaton	<b>Requiring hospitals to establish protocols for encouraging organ and tissue donations for transplantation purposes.</b> OSMA Position: <i>Support</i>	House Comm. Public Health <i>Dead</i>
<b>SJR 9</b> Hooper	<b>Proposed constitutional amendment repealing Section 15, Article VII, which states that all juries shall return general verdicts.</b>	Senate Comm. Judiciary <i>Dead</i>	<b>HB 1063</b> Smith	<b>Providing that punitive or exemplary damages shall be payable to the state.</b>	House Comm. Insurance <i>Dead</i>
<b>SJR 10</b> Hooper	<b>Proposed constitutional amendment repealing Section 7, Article XXIII, which states that damages for wrongful death may not be taken away or limited and provides exceptions.</b>	Senate Comm. Judiciary <i>Dead</i>			

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## BILLS CARRIED OVER FROM 1987 SESSION (continued)

HB 1105 Lewis	Appropriating \$2,475,469 to the Workers' Compensation Administration Fund.	House Comm. A. & Budget	HB 1305 Anderson	New law providing that health insurance coverage providing benefits for the treatment of alcoholism and drug dependency shall be offered for all health insurance contracts issues or renewed on or after January 1, 1988.	House Comm. Mental Health <i>Dead</i>
HB 1164 Harris, Ken	Prohibiting sheriffs from transporting juveniles unless certified as qualified to perform such duty.	Senate Comm. Judiciary <i>Dead</i>	HB 1323 Koppel	Directing closure of the Oklahoma College of Osteopathic Medicine and Surgery.	House Comm. Rules
HB 1167 Roberts, Larry	Prohibiting smoking in public school buildings and facilities and in any enclosed, indoor area owned or operated by the state or any political subdivision, which is used by the public, serves as a workplace or is used as a meeting place for a public body.	House Comm. Public Health <i>Dead</i>	HB 1332 Riggs	Providing qualifications for directors of city-county health departments.	Conference Committee <i>Rejected (1987)</i>
HB 1170 Anderson	Modifying the definition of deprived child to include children whose parents refuse them medical care because of religious beliefs when permanent physical damage could result and communicable disease and sanitation laws are violated.	House Comm. Human Services <i>Dead</i>	HB 1360 Heaton	Encouraging local governments to exercise their discretion in adopting a 911 emergency number system.	House Comm. Govt Oper. <i>Dead</i>
HB 1174 Holden	Providing that no action for medical malpractice may be commenced before the claimant's complaint has been submitted for mediation and an opinion rendered by the mediator, with exception for an agreement between both parties that an action may be commenced without mediation.	House for Senate amend- ments (5/13/87)	HB 1365 White Steidley	New law requiring written notification of decision not to provide insurance coverage.	Senate Comm. Bus. & Labor <i>Dead</i>
HB 1175 Holden	Providing that no member of a peer review committee constituted by a hospital related institution, certain societies or associations shall be deemed liable in damages for any action taken within the scope of the function of such committee.	Senate Comm. Judiciary <i>Dead</i>	HB 1425 Stacy	Deleting a provision which requires certain people to administer anesthesia in the immediate presence of a physician, osteopath or dentist.	House Comm. Rules <i>Dead</i>
HB 1212 Leist	Requiring persons seeking to obtain a marriage license to file a certificate stating that each party has been given a standard screening test to detect the presence of antibodies to the human T-lymphotropic virus type III.	House Comm. Public Health <i>Dead</i>	HB 1440 George	Prohibiting the State Department of Health from issuing any permits for the disposal or storage of controlled industrial waste in a landfill with exceptions.	House Comm. Public Health <i>Dead</i>
HB 1219 Duckett	"Equitable Mental Health Insurance Act." OSMA Position: <i>Support</i>	House Comm. Mental Health <i>Dead</i>	HB 1459 Hunter	Creating the Workers' Compensation Agency to administer the Workers' Compensation Act.	Senate Comm. Judiciary <i>Dead</i>
HB 1224 Williams, P.	Authorizing certain persons to petition for the commitment of drug dependent persons to medical or other facilities for treatment.	House Comm. Mental Health <i>Dead</i>	HB 1480 Bastin	Requiring insurance policies to include coverage for certain transplantation operations.	House Comm. Insurance <i>Dead</i>
HB 1227 Henshaw	"Product Liability Act," outlining types of claims and actions to be deemed product liability actions.	Senate Comm. Judiciary <i>Dead</i>	HB 1483 Hill	Transferring Oklahoma Teaching Hospitals from Dept. of Human Services to Oklahoma Medical Center Authority.	House Comm. Hum. Services <i>Dead</i>
			HB 1487 Hobson	Creating the Oklahoma Board of Nurse Licensure and Nursing Education.	House Comm. Public Health <i>Dead</i>
			HJR 1022 Larason	Providing for appointment of a task force to study teenage pregnancy and teenage parenting and appointment of an advisory board.	House Comm. Public Health <i>Dead</i>

## BILLS INTRODUCED IN THE 1988 SESSION

SB 362 Cole	An Act relating to Professions and Occupations; allowing persons employed as Limited Institutional Practitioners to hold Supervised Medical Doctor status for duration of certain employment.	Conference Committee: Cole, Roberts, Brown/Mentzer, Manar, Henry	SB 479 Cole/Thompson	Creating the nurses aide and medication aide regulation act . . . providing for the powers and duties of the State Board of Health and the Commissioner of Health . . . creating the nurses aide and medication aide regulation revolving fund . . . <i>Oppose</i>	Conference Committee: Rozell, Dennis, Dickerson, Taliaferro, & Cole
SB 419 McCune	An Act relating to Corporations; amending Section 2, Chapter 195 . . . which relates to immunity of Directors of nonprofit corporations.	Signed by Governor 4/8/88	SB 484 Green	Creating Oklahoma Workers' Compensation Medical Board . . . <i>Monitor</i>	Senate Comm. Judiciary <i>Dead</i>
SB 439 Hooper	Regulation of the sale of drugs; authorizing trained assistant to administer medication under the supervision of physician.	Vetoed by Governor 3/18/88	SB 511 Hooper	Requiring notification of the father of an unborn child before an abortion can be performed and providing exceptions . . . <i>Monitor</i>	Senate Comm. Hum. Resources <i>Dead</i>
SB 455 Hooper Williams, F.	Recreating the Board of Examiners for Speech Pathology and Audiology until July 1, 1993.	Senate for House amend- ments			

(continued)



posals. To our knowledge, there have been no complaints on the part of citizens in Oklahoma regarding the current licensure mechanism.

**HB 1920** Speaker Barker and Senator Cullison will be moving this bill which will contain all of the boards and commission that are up for sunset review. The Board of Medical Licensure and Supervision was not supposed to be up for review until next year; however, they have been included in this bill along with the other health professions that are up for review next year. The result is an omnibus bill that the Governor will have to sign, recreating all the boards and commissions, or veto, recreating none of them. The rationale for this approach has more to do with the legislative process than with anything else. If the Governor vetoes the bill, we will only have to override the Governor once, as opposed

to sixteen times if we did it on an individual basis. The bill requires a 3/4 majority of both houses on an override with an emergency. This is going to be extremely difficult to do because the Republican vote will be essential, and it remains to be seen as to whether the Republicans in the Legislature lock up with the Governor on this issue. If we cannot win this battle this year, in my opinion, we will have lost of Board's autonomy.

**HB 1857** This bill provides that no legislative enactment to mandate or require the offering of health care coverage or services shall apply to any insurer unless the proposal applied equally to employee benefit plans described in the Employee Retirement Income Security Act of 1974. In effect, this bill would repeal all health insurance mandates. The bill was strongly supported by the State Chamber of

Commerce. The overall impact of this legislation would be difficult to determine in the few weeks we were given to study it. Although the Council historically has taken a position to oppose any health insurance mandates, we had not been confronted with the issue of supporting or opposing an initiative to repeal all health insurance mandates. The bill passed, by an almost unanimous vote, the house of Representatives, and was assigned to the Senate Business and Labor Committee. The bill was never put on the agenda. This is an issue that the State Medical Association will be studying closer during the interim in order to have a better understanding of the quality of access to health care in the state of Oklahoma. There were several bills introduced this session that would have mandated coverage by insurance agencies; all of them were de-

#### BILLS INTRODUCED IN THE 1988 SESSION (continued)

SB 526 Rhodes	<b>Relates to persons who may perform abortions;</b> deleting requirement of a general hospital. . . . <i>Monitor</i>	Senate Comm. Hum. Resources <i>Dead</i>	SB 607 Gardenhire	<b>Allowing defendants in personal injury or wrongful death lawsuits who are required to pay more than \$100,000 in damages . . . to elect to pay in monthly installments . . .</b> <i>Support</i>	Senate Comm. Judiciary <i>Dead</i>
SB 549 McCune	<b>Prohibiting persons from allowing passengers of less than 16 years of age to ride in the bed of or on the tailgate of a pickup truck operated on public roads of the state. . .</b> <i>Support</i>	Conference Committee: McCune, Dudley Horner/Thompson Steidley, Hill	SB 613 Brown	<b>Clarifying statutory references regarding child passenger restraint systems.</b> <i>Support</i>	Senate Comm. Transportation <i>Dead</i>
SB 566 Rhodes	<b>Requiring physicians to report cases of Acquired Immune Deficiency Syndrome, AIDS related complex, Human T-Lymphotropic Virus Type III or AIDS antibodies to the State Health Department in the same manner as venereal disease; requiring physicians to notify local health officers if an AIDS victim is acting, or is about to act, in a way as to expose others to the virus; requiring the State Board of Health to adopt rules and regulations for the quarantine of persons infected with AIDS; providing for confidentiality of records identifying AIDS victims; providing exceptions; making violations of confidentiality requirements misdemeanors . . .</b> <i>Oppose</i>	Senate Comm. Human Resources <i>Dead</i>	SB 615 Hendrick	<b>Expanding the State Department of Health's authority to set up laboratory facilities and use of existing facilities to test for the detection of all diseases.</b> <i>Oppose</i>	Senate Comm. Human Resources <i>Dead</i>
SB 584 Hendrick	<b>Providing for several liability when the plaintiff's negligence or percent of fault is found to be in excess of 15 percent and providing for joint liability when the plaintiff's negligence or percentage of fault is found to be equal to or less than 15 percent . . .</b> <i>Support</i>	Senate Comm. Judiciary <i>Dead</i>	SB 625 Hendrick	<b>Making failure to report diseases as required by the State Board of Health a felony . . .</b> <i>Oppose</i>	Senate Comm. Crim. Juris <i>Dead</i>
SB 599 Gardenhire	<b>Creating the Department of Occupational Licensing.</b>	Senate Comm. Bus. & Labor <i>Dead</i>	SB 635 Hooper	<b>Prohibiting insurers from using present value discounting for computing reserves for property and casualty insurance.</b>	Conference Committee: Holden, Cox, Widener/Hooper, Brown, Taylor
SB 604 Stipe	<b>Requiring group health and accident insurance policies to provide coverage for the handicapped dependents of the insured. . .</b> <i>Support</i>	Senate Comm. Bus. & Labor <i>Dead</i>	HB 1521 Cotner	<b>Relates to Hydration and Nutrition Act for incompetent patients.</b> <i>Monitor</i>	House Comm. Public Health <i>Dead</i>
SB 606 Snyder	<b>Defining actions which constitute products liability; providing that a claimant must institute a products liability action within two years of the date of injury . . .</b> <i>Support</i>	Senate Comm. Judiciary <i>Dead</i>	HB 1534 Murphy	<b>Revenue and Taxation; Sales tax exemptions; providing exemption for funeral sves and sales of certain tangible personal property; excluding certain items from exemption.</b> <i>Support</i>	Senate Comm. Finance <i>Dead</i>
			HB 1542 Holden	<b>Relates to group accident and health insurance; modifying requirements for extension of benefits.</b>	Signed by Governor 3/17/88

(continued)



## BILLS INTRODUCED IN THE 1988 SESSION (continued)

<b>HB 1563</b> Lewis/ Johnson	Oklahoma Health Planning Commission Appropriation	GCCA	<b>HB 1798</b> White/Hamilton Miles-LaGrange	Requiring notification of certain emergency personnel on exposure to certain diseases; authorizing certain rules and regulations; requiring certain confidentiality. <i>Support concept</i>	House for Senate amend- ments
<b>HB 1564</b> Lewis/ Johnson	Department of Mental Health Appropriation	GCCA	<b>HB 1799</b> Brewster	Relates to the Uniform Controlled Dangerous Substances Act . . . adding Buprenorphine. <i>Support</i>	Senate Comm. Human Resources <i>Dead</i>
<b>HB 1604</b> Vaughn	Relates to services by healing arts practitioners; modifying requirements for certain insurers; providing that insurer may not prohibit certain treatment or limit certain benefits; requiring practitioner be compensated at certain time.	Failed Hosue <i>Bill is dead</i>	<b>HB 1809</b> Duckett	Authorizing mental health employees to work at higher education facilities. <i>Monitor</i>	Stricken from Calendar <i>Dead</i>
<b>HB 1608</b> Henry	Relating to psychiatric and psychological records; modifying list of persons entitled to access of certain records.	Senate Comm. Judiciary <i>Dead</i>	<b>HB 1840</b> Duke/Vaughn Roberts	Authorizing chiropractic physicians to dispense certain substances . . . <i>Oppose</i>	House Comm. Public Health <i>Dead</i>
<b>HB 1660</b> Larason	Relates to the licensure of Social Workers; requiring posting of certain licenses; requiring certain information to be made available to the public.	Conference Committee: Brown, Hooper, Taylor/Larason, Lewis, Hudson	<b>HB 1857</b> Hale	Providing that no legislative enactment to mandate or require the offering of health care coverages or services shall apply to any insurer unless the proposal applies equally to employee benefit plans described in the Employee Retirement Income Security Act of 1974. <i>Monitor</i>	Senate Comm. Bus. & Labor <i>Dead</i>
<b>HB 1678</b> Mentzer	Authorizing the Dept. of Human Services to contract with former employees to provide direct care and treatment to department clients who are mentally retarded or have other developmental disabilities.	Conference Committee Report passed the House - To Senate	<b>HB 1862</b> Talley	Providing procedures for obtaining the performance of abortions on minors. <i>Monitor</i>	House Comm. Public Health <i>Dead</i>
<b>HB 1688</b> Smith	An Act relating to public health and safety; requiring food handlers to take tests for the human immunodeficiency virus infection; requiring the State Board of Health to promulgate rules and regulations; providing for costs; providing penalties; defining term.	House Comm. Bus. & Commerce <i>Dead</i>	<b>HB 1863</b> Clark	Requiring certain abortions to be performed in certain facilities; requiring licensure . . . <i>Monitor</i>	House Comm. Public Health <i>Dead</i>
<b>HB 1703</b> Hutchcroft	An Act relating to Workers' Compensation; prohibiting the release of certain information by the Workers' Compensation Court; providing an exception; repealing Section 29, Chapter 222, O.S.L. 1986 (85 O.S. Supp 1987, Section 110), which relates to employers inquiry concerning previous injury claims of employees.	House Comm. Judiciary- Ind. & Labor Regulations DOUBLE ASSIGNED <i>Dead</i>	<b>HB 1864</b> Lewis	The "Older Oklahomans Act"; creating the 17-member Oklahoma Commission on Aging; outlining powers and duties; creating the Oklahoma Department of Aging.	House Comm. Human Services <i>Dead</i>
<b>HB 1715</b> Kamas	Prof and Occupations; Speech Pathology and Audiology Licensing Act; modifying and adding certain definitions; recreating the Bd of Examiners for Speech Pathology and Audiology . . . <i>Support</i>	House Comm. Public Health <i>Dead</i>	<b>HB 1910</b> White Miles-LaGrange	Requiring licensure of facilities providing laboratory services to test for evidence of the HIV infection.	To House for Senate amendments
<b>HB 1728</b> Williams, F.	Requiring certain insurance policies to provide coverage for low-dose mammography. <i>Monitor</i>	Incorporated in SB 612 (Signed by Governor 4/5/88)	<b>HB 1920</b> Williams, F. Kamas Hooper	Terminating several state boards and commissions as of July 1, 1994 . . .	Conference Committee: Hooper, Luton, Cullison/ Williams F. Barker, Davis G.
<b>HB 1729</b> Apple	Authorizing the use of a physically disabled license plate in lieu of a detachable insignia for parking purposes. <i>Support</i>	House Comm. Crim. Justice <i>Dead</i>	<b>HB 1925</b> Bumpus	Prohibiting any person from operating abortion clinic unless such person has obtained a license from the state health commissioner . . .	House Comm. Public Health <i>Dead</i>
<b>HB 1734</b> Bastin	Requiring certain insurance coverage for diabetic self-management education programs.	House Comm. Insurance <i>Dead</i>	<b>HB 1953</b> Benson	New law creating the Advisory Medical Panel and the Workers' Compensation Appellate Division; modifying procedures for selecting physicians for determining workers' compensation disabilities . . . <i>Support</i>	Conference Committee: Stipe, Dennis
<b>HB 1736</b> Harris, K. Hooper	Alcohol and drug abuse prevention, training treatment and rehabilitation authority . . . <i>Oppose</i>	House Comm. Mental Health <i>Dead</i>	<b>HB 1968</b> White	Providing that an information sheet concerning HIV infection shall be provided with each marriage license issued . . . <i>Support</i>	Failed House
<b>HB 1753</b> Istook	Relates to controlled substances under the Uniform Controlled Dangerous Substances Act . . . ; modifying the list of Schedule II controlled substances, adding Cocaine. <i>Support</i>	Signed by Governor 3/21/88	<b>HB 1974</b> White	Requiring passengers under 18 riding in vans to wear seat belts . . . <i>Support</i>	Failed House <i>Bill is dead</i>
<b>HB 1796</b> White/Hamilton Miles-LaGrange	Requiring certain test for tissue and organ donors. <i>Support concept</i>	Hosue for Senate amend- ments	<b>HCR 1064</b> White Hamilton, Jeff Miles-LaGrange	Encouraging and directing state and private entities to coordinate their efforts relating to the HIV infection. <i>Support</i>	Filed with Secretary of State
<b>HB 1797</b> White/Hamilton Miles-LaGrange	Requiring approved treatment centers to provide Human Immunodeficiency Virus infection education sessions . . . <i>Support concept</i>	Signed by Governor 3/25/88			

feated with with the exception of the up and down struggle of the mammo-gram bill (which is still going on). The policy of the Legislature is not to mandate any health insurance coverages other than those already in the statutes.

**HB 1546** We have actively worked toward the passage and funding of the Physician Manpower Training Commission. This has involved a concerted effort by our Association, the Osteopathic Association, the Hospital Association, and the Nurses Association. As you know, the Governor vetoed the bill last year, and our efforts through the interim and this session have been centered around strategy to convince the Governor that this is an important program. We are anxiously awaiting the Governor's decision to sign or veto this bill.

**HB 439** This bill was introduced at the request of the Association. It was introduced to clean up a technical error created by SB 39, the physician dispensing bill. I only point out this bill to bring up the issue of physician dispensing. It is my opinion that the Pharmaceutical Association will introduce a bill next year to, once again, attempt to take away physicians' right to dispense for profit. Please let your legislators know how important this issue is to the basic principles of your practice.

**NOTE:** Two important issues, tort reform and AIDS, are covered in other reports in this book. You may find these reports as follows:

Report of the Return to Reason Coalition

Report of the Task Force on AIDS

## Conclusions

Finally, I do not want to close without taking time to thank you for all the help you have given your profession through your involvement in the political process. Those of you who participated in "Medicine Day" at the State Capitol experienced firsthand the progress we have made over the last few years. It's exciting and we have just begun. We realize how difficult it is for you to maintain your practice and take the time to be knowledgeable about legislative issues; yet, many of you have recognized the fact that you can no longer afford not to be involved and have arranged your schedules to

help yourself by protecting medicine through the legislative process. We hope that the Council on State Legislation has assisted you and made that endeavor easier and more productive.

Budget Request: \$65,000.00

Respectfully submitted,  
Larry L. Long, MD, Chairman  
William L. Hughes, MD  
Nolen L. Armstrong, MD  
M. Tom Buxton, Jr., MD  
Hugh M. Conner, Jr., MD  
Raymond Cornelison, Jr., MD  
Robert S. Ellis, MD  
John B. Forrest, MD  
Richard L. Hromas, MD  
Stanley Jett, MD  
William P. Jolly, MD  
William J. Kruse, MD  
Thomas A. Marberry, MD  
Gary Massad, MD  
Robert Melichar, MD  
Steven A. Mueller, MD  
Michael J. Schwartz, MD  
Daniel J. Sexton, MD  
Sherry Strebel, Auxilian  
Stephen Acker, MD  
John Bumpus, MD  
Jeannie Drake, Auxilian  
Vaughn Dean Fuller, Auxilian  
Mark R. Johnson, MD  
Donald G. Kassebaum, MD  
Perry A. Lambird, MD  
Joan K. Leavitt, MD  
Nadine Nickeson, Auxilian  
George F. Short, Attorney  
Julie Weedn, Auxilian  
Otie Ann Carr, Staff

## Report of the COUNCIL ON MEMBER SERVICES

Subject: **Annual Report**

Presented by: William O. Coleman, MD, Chairman

Referred to: Reference Committee III

### Introduction

The Council on Member Services is charged with the responsibility of locating or developing programs or services that could directly benefit the members of the OSMA.

### Activities

The Council on Member Services, during the past year, has endorsed or

sponsored a number of different activities as follows:

A. Sponsored a bankcard program for all OSMA members.

B. Endorsed the I.C. Systems Collection Agency and recommended it to OSMA members that could not acquire good collection services otherwise.



Oklahoma City psychiatrist Gordon H. Deckert, MD, sits thoughtfully in the House of Delegates.

C. Endorsed an offer to OSMA members, Pre-Paid Legal Insurance.

D. Made available to all OSMA members Workers' Compensation Insurance through the Dodson Insurance Group.

E. Developed and sponsored 20 seminars, beginning in mid-June, on various medical office management subjects. These included two seminars introducing the new Workers' Compensation Fee Schedule for Oklahoma, two seminars on computers in medical practice, two new employee seminars, two seminars each on marketing and



building a medical practice and collecting medical accounts, one seminar on financial planning for physicians, and seven seminars (offered in numerous places throughout the state) on the use of the new Workers' Compensation Fee Schedule and the Court Adminis-

trator's program to assist physicians in collecting their fees.

F. Implemented a printing service to offer discount printing to members in the greater Oklahoma City area.



John A. Blaschke, MD, Oklahoma City, shares a good story with . . .

trator's program to assist physicians in collecting their fees.

G. Endorsed a cellular automobile telephone purchase and installation program for central Oklahoma area. A special discount, plus 100 free air time minutes, was arranged.

The Council is currently developing or studying the following potential programs:

- A credit union for OSMA members and their employees.
- Home health care insurance coverage.
- Improving insurance coverage

for older OSMA member physicians including disability income, overhead expense, life insurance, etc.

D. Developing a seminar on "Protecting Your Assets" for physicians. Tentatively scheduled for fall of 1988.

E. Developing a seminar on "Tax Planning for the Physician." Tentatively scheduled for late October or early November.

During OSMA year 1987-88, the activities of the Member Services Council and Corporation have generated a net profit to the OSMA of approximately \$20,000.

Respectfully submitted,  
 William O. Coleman, MD, Chairman  
 William G. Bernhardt, MD  
 Tim S. Caldwell, MD  
 Jack T. Dancer, MD  
 E. Edwin Fair, MD  
 Wilfred S. Gauthier, MD  
 Joe Ray Hamill, MD  
 Joe S. Hester, MD  
 George H. Jennings, MD  
 John F. Josephson, MD  
 Herbert M. Kravitz, MD  
 Richard A. McKinne, MD  
 Gene Muse, MD  
 Paul O. Shackelford, MD  
 S. Fulton Tompkins, MD

## Report of the AD HOC COMMITTEE ON PHYSICIAN LEGAL ACTION SUPPORT

Subject: **Annual Report**

Presented by: Orange M. Welborn,  
MD, Chairman

Referred to: Reference Committee III

### Background

Physicians sued for medical malpractice are seriously affected by the allegations and the legal processes to which they are subjected as a result of the suit. Some studies indicate that the stress and trauma resulting from legal action affect both professional and personal behavior and can have a profound effect on not only the doctor but his wife and family as well.

On a number of occasions various committees of physicians, including the PLICO Board, have discussed ways of offering assistance to physicians

and their families that have been sued. M. Joe Crosthwait, MD, current President of OSMA, appointed an ad hoc committee to study various options and to make a report as to the wisdom and viability of developing a program for Oklahoma.



. . . OSMA Past President Elvin M. Amen, MD, Bartlesville.

### Action

The committee, consisting of five physicians and six auxiliaries, met on April 30 to review a considerable amount of literature and materials provided by the AMA, AMA Auxiliary and various state medical societies. There was indepth discussion about the effect of lawsuits on physicians; the loss of esteem; and the withdrawal, anger, rejection and other emotions associated with adverse legal action. The legal limitations on the committee prohibiting discussion of the medical merits of the care were considered.

### Summary and Recommendations

After lengthy discussion the com-



mittee concluded that indeed a support committee would be appropriate and helpful to physicians and families involved in adverse legal action, and that the OSMA president be authorized to appoint such a committee under the following general guidelines:

1. *Purpose* — to respond to physicians and their families whenever there are lawsuits or accusations that result in adverse actions against physicians.
2. *Scope* — activities of the committee should include prevention, coping with the current situation; rehabilitation and coping with the aftermath.
3. *Composition* — The committee should be broad-based geographically and by specialty and include equal numbers of physicians and auxiliaries and some representation from psychiatry.

The ad hoc committee urges the careful scrutiny by OSMA attorneys of the committee plan prior to implementation to ensure that no action by the committee or its members will aggravate the lawsuit in any way.

Respectfully submitted,  
 Orange M. Welborn, MD, Chairman  
 J. Hartwell Dunn, MD  
 J. B. Eskridge III, MD  
 Leo Meece, MD  
 Mrs. Julie Weedn  
 Mrs. Susan Brown  
 Mrs. Mary Ann Deen  
 Mrs. Jan Milton  
 Mrs. Pam Oster  
 Mrs. Jan Storms

## Report of the OKLAHOMA MEDICAL POLITICAL ACTION COMMITTEE

Subject: **Annual Report**  
 Presented by: Larry L. Long, MD,  
 Chairman  
 Referred to: Reference Committee III

### Introduction

The Oklahoma Medical Political Action Committee is a voluntary, unincorporated entity made up of individual physicians and spouses interested in helping political candidates become elected to office. OMPAC

is an independent and autonomous organization managed by a Board of Directors. The Board of Directors has control over the policies and activities of the Committee and serve without compensation. The OMPAC Board conducts the business of the Committee and otherwise meets several times during an election year to distribute OMPAC funds to candidates.

### Review of Activities

The Oklahoma Medical Political Action Committee is in the process of having one of the finest fundraising years in recent memory. Solicitations to physicians and spouses in the first quarter alone have raised over \$45,000.00! As 1988 is an election year, OMPAC will be meeting at least three times, with one of the meetings to be scheduled in Tulsa, Oklahoma.

The OMPAC financial report as of April 1, 1988 is:

Total dollars raised	
(1987-88):	\$125,216.46
Contributions to AMPAC:	54,000.00
Subtotal:	71,216.46
Less	
Contributions/Expenses:	16,221.00
Cash on Hand:	54,995.46

OMPAC membership for the first quarter of 1988 is listed below:

Auxiliary Membership:	7*
Resident/Student:	11
Regular Member (\$50.00):	525
Sustaining Member (\$100.00):	89
"200 Club" Member (\$200.00):	34
Present Total Membership:	666

\*It should be noted that the Auxiliary dues statement was not mailed until March 15, 1988.

### Conclusions

OMPAC is pleased with the increased political involvement by the OSMA and OSMAA.

The Oklahoma Medical Political Action Committee will continue to increase contributions and membership figures throughout 1988. OMPAC will

continue to strive for excellence in every aspect of political action in an effort to not only protect physicians but our patients as well.

The OMPAC Board of Directors would like to encourage your continued participation and we earnestly request each physician's and auxiliary's input on candidate support during the upcoming elections.

For contribution purposes, the OMPAC Board of Directors will begin meeting in May, 1988.

Respectfully submitted,  
 Larry L. Long, MD, Chairman

## Report of the PHYSICIAN RECOVERY COMMITTEE

Subject: **Annual Report**  
 Presented by: Ted Clemens, Jr., MD,  
 Chairman  
 Referred to: Reference Committee III

### Introduction

Once again the OSMA Physician Recovery Committee (PRC) program has experienced another year of progress.

PRC Medical Director J. Darrel Smith, MD, merits our congratulations for two significant accomplishments this year. Dr. Smith was one of 500 physicians to be certified in addictionology this year by the American Medical Society on Alcoholism and Other Drug Dependencies (AMSAODD). In addition, Dr. Smith and his wife Paula received the Annual Caduceus Foundation Award for their work with impaired physicians and their families in Oklahoma. The award was presented during ceremonies in Atlanta, Georgia, as part of the Caduceus Foundation Annual Meeting.

Physicians from 36 communities in Oklahoma are being followed by the PRC.

During the past year, the PRC has solidified formal relationship with the Oklahoma Osteopathic Association (OOA) and the Oklahoma Veterinary Association. The OVA contributes \$1,000 per month to subsidize the PRC; OVA contributes \$500 per month.

Currently 170 professionals (den-

tists, podiatrists, veterinarians, PhD's) are being followed by the PRC. One hundred thirty-five (135) are physicians.

The breakdown by physician specialty is:

FP/GP .....	38
Surgery	
(Inclusive) .....	22
OB/GYN .....	9
OPHTH .....	5
ANES .....	8
PED .....	9
IM .....	9
ER .....	8
PATH .....	5
PSYCH .....	8
RAD .....	5
Medical Students .....	5
MISC .....	4

The number of physicians in the program has increased dramatically since the program was a voluntary one in 1983:

Year	Physicians in Program
1983	18
1984	35
1985	57
1986	87
1987	125
1988	

(through March) 135

Estimates as to the number of physicians dependent on alcohol or drugs range from ten percent, about the same as the general public, to almost one in every five physicians.

The growth in the number of physicians in the OSMA PRC program is clear and dramatic.

The addition this year of Mason Lyons, MD, as PRC Assistant Medical Director for Eastern Oklahoma is another significant advancement for our program. In only a few short years, the OSMA PRC ranks with the most progressive in the nation.

But our program is at a crossroads. The increasing number of physicians in need of treatment, extensive follow-up care and monitoring, and counsel-

ing of friends, colleagues and most of all family members has required more and more hours of work from the PRC medical director.

With the number of people already in the program and statistics indicating that many physicians have yet to be reached, the time required by the medical director to adequately address the needs of Oklahoma physicians suffering from the disease of alcohol or drug addiction can only increase and increase significantly if the job is to be done correctly.

The Medical Director currently conducts these duties on a part-time basis.

It is, therefore, the recommendation of the PRC that the OSMA create and fund the full-time position of Medical Director for the OSMA PRC.

A proposed job description is included with this report.

The PRC also recommends retaining the position of Assistant Medical Director on its current part-time basis.

It is sometimes difficult to calculate in concrete terms the value of the PRC. The 135 physicians currently in the program constitute almost one medical school class. The majority of these physicians are back in productive practice. The economic loss of an entire medical school class can only be speculated to be in the hundreds of millions of dollars.

In only a few short years, the OSMA Physician Recovery Program has become a national model.

The Committee recommends we continue to be national leaders in this field by appointing a full-time medical director.

Budget Request: \$120,000

Respectfully submitted,  
Ted Clemens, Jr., MD, Chairman  
J. Darrel Smith, Medical Director  
Mason Lyons, MD, Assistant  
Medical Director  
Homer Archer, MD

Luis A. Barrios, MD  
Ted J. Brickner, Jr., MD  
John Chelf, MD  
Donald Cooper, MD  
Marcus Cox, MD  
Carl Critchfield, MD  
Frank Crowe, MD  
Gordon Deckert, MD  
David V. Eakin, MD  
Robert G. Ellis, MD  
Donald C. Karns, MD  
Thomas S. Llewellyn, MD  
George C. Moore, MD  
Joy Quinn, OSMA Auxiliary  
James Rhymer, MD  
Charles J. Shaw, MD  
Harold Thiessen, MD  
Rhonald Whiteneck, MD  
V. William Wood, MD  
Michael Sulzyski, OSMA Staff

**PROPOSED JOB DESCRIPTION  
MEDICAL DIRECTOR**  
Oklahoma State Medical Association  
Physician Recovery Program

**Administrative**

1. Directs Program.
2. Interfaces with Board of Trustees of MSNJ/NJAOPS/NJVMA.
3. Interfaces with State Board of Medical Examiners and State Board of Veterinary Medicine.
4. Prepares budgets/monitors expenditures.
5. Interfaces with financial supporters.
6. Prepares *Journal* articles about the Program.
7. Travels around the state and country lecturing about the Program to medical audiences at hospital staff meetings, county medical society meetings, state medical society meetings, etc.
8. Prepares reports.
9. Assists components in preparing educational seminars.
10. Works with judicial committees/council in evaluating physicians/cross referral.

**Clinical**

1. Document allegations of impairment.
2. Confront impaired physician in team approach or individually.
3. Structures treatment plan.
4. Interfaces with personnel at treatment facilities.
5. When possible, visits physicians while in treatment.
6. Participates in aftercare planning.
7. Prepares letters of support in area of hospital appointment or employment.
8. Appears as advocate at State Board of Medical Examiners, hospital credentials committees or in court.
9. Maintains personal contact in followup.



## Myth:

# All alcoholics are drunks.

## Reality:

Alcoholism is a disease that is not restricted to any particular social class, economic status or profession. In fact, you may be surprised to learn that some health professionals have a dependency problem. What happens when the professionals who care for others need help themselves?

At Timberlawn Psychiatric Hospital, a special program exists to help health professionals overcome substance abuse problems. A range of treatment options, individual and group therapy programs, and other recovery-oriented services are all geared toward the unique needs of the health professional. An individualized evaluation leads to selection of the most appropriate treatment program, which is further enhanced by specialized after-care and monitoring services. Treatment team members include Board Certified psychiatrists, clinical psychologists, psychiatric social workers and substance abuse counselor specialists with certification in their field. The Twelve Step Programs are emphasized throughout the recovery process.

At Timberlawn, we understand the unique challenges faced by health professionals today. Effective treatment is available.



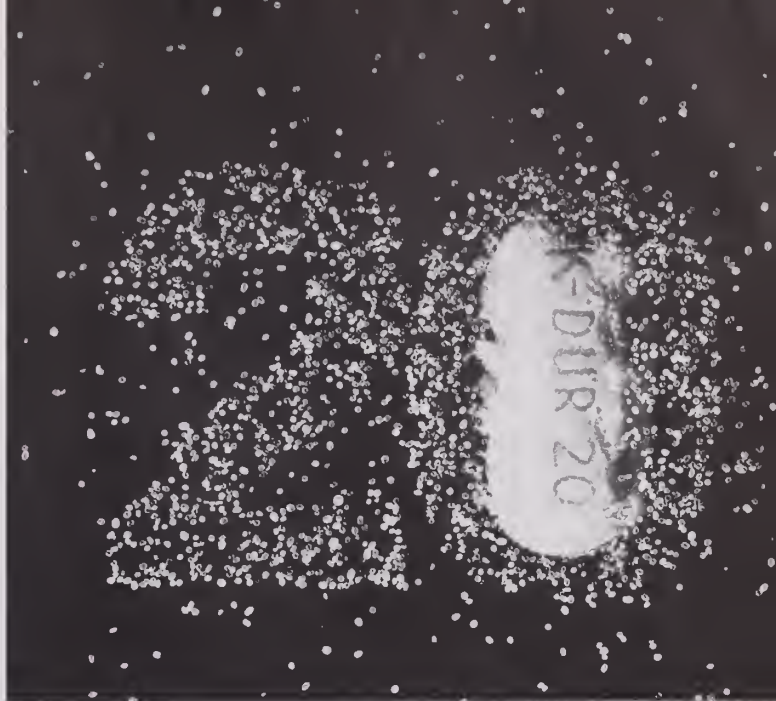
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Please see next page for brief summary of prescribing information.

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# K-DUR<sup>TM</sup> Microburst Release System<sup>TM</sup> (potassium chloride) Sustained Release Tablets

**INDICATIONS AND USAGE:** BECAUSE OF REPORTS OF INTESTINAL AND GASTRIC ULCERATION AND BLEEDING WITH SLOW-RELEASE POTASSIUM CHLORIDE PREPARATIONS, THESE DRUGS SHOULD BE RESERVED FOR THOSE PATIENTS WHO CANNOT TOLERATE OR REFUSE TO TAKE LIQUID OR EFFERVESCENT POTASSIUM PREPARATIONS OR FOR PATIENTS IN WHOM THERE IS A PROBLEM OF COMPLIANCE WITH THESE PREPARATIONS.

1. For therapeutic use in patients with hypokalemia with or without metabolic alkalosis, in digitalis intoxication and in patients with hypokalemic familial periodic paralysis.

2. For the prevention of potassium depletion when the dietary intake is inadequate in the following conditions: Patients receiving digitalis and diuretics for congestive heart failure, hepatic cirrhosis with ascites, states of aldosterone excess with normal renal function, potassium-losing nephropathy, and with certain diarrheal states.

3. The use of potassium salts in patients receiving diuretics for uncomplicated essential hypertension is often unnecessary when such patients have a normal dietary pattern. Serum potassium should be checked periodically, however, and if hypokalemia occurs, dietary supplementation with potassium-containing foods may be adequate to control milder cases. In more severe cases supplementation with potassium salts may be indicated.

**CONTRAINDICATIONS:** Potassium supplements are contraindicated in patients with hyperkalemia since a further increase in serum potassium concentration in such patients can produce cardiac arrest. Hyperkalemia may complicate any of the following conditions: Chronic renal failure, systemic acidosis such as diabetic acidosis, acute dehydration, extensive tissue breakdown as in severe burns, adrenal insufficiency, or the administration of a potassium-sparing diuretic (e.g., spironolactone, triamterene).

Wax-matrix potassium chloride preparations have produced esophageal ulceration in certain cardiac patients with esophageal compression due to enlarged left atrium.

All solid dosage forms of potassium chloride supplements are contraindicated in any patient in whom there is cause for arrest or delay in tablet passage through the gastrointestinal tract. In these instances, potassium supplementation should be with a liquid preparation.

**WARNINGS: Hyperkalemia**—In patients with impaired mechanisms for excreting potassium, the administration of potassium salts can produce hyperkalemia and cardiac arrest. This occurs most commonly in patients given potassium by the intravenous route but may also occur in patients given potassium orally. Potentially fatal hyperkalemia can develop rapidly and be asymptomatic. The use of potassium salts in patients with chronic renal disease, or any other condition which impairs potassium excretion, requires particularly careful monitoring of the serum potassium concentration and appropriate dosage adjustment.

**Interaction with Potassium-Sparing Diuretics**—Hypokalemia should not be treated by the concomitant administration of potassium salts and a potassium-sparing diuretic (e.g., spironolactone or triamterene) since the simultaneous administration of these agents can produce severe hyperkalemia.

**Gastrointestinal Lesions**—Potassium chloride tablets have produced stenotic and/or ulcerative lesions of the small bowel and deaths. These lesions are caused by a high localized concentration of potassium ion in the region of a rapidly dissolving tablet, which injures the bowel wall and thereby produces obstruction, hemorrhage or perforation.

K-DUR tablets contain micro-crystalloids which disperse upon disintegration of the tablet. These micro-crystalloids are formulated to provide a controlled release of potassium chloride. The dispersibility of the micro-crystalloids and the controlled release of ions from them are intended to minimize the possibility of a high local concentration near the gastrointestinal mucosa and the ability of the KCl to cause stenosis or ulceration. Other means of accomplishing this (e.g., incorporation of potassium chloride into a wax matrix) have reduced the frequency of such lesions to less than one per 100,000 patient years (compared to 40–50 per 100,000 patient years with enteric-coated potassium chloride) but have not eliminated them. The frequency of GI lesions with K-DUR tablets is, at present, unknown. K-DUR tablets should be discontinued immediately and the possibility of bowel obstruction or perforation considered if severe vomiting, abdominal pain, distention, or gastrointestinal bleeding occurs.

**Metabolic Acidosis**—Hypokalemia in patients with metabolic acidosis should be treated with an alkalinizing potassium salt such as potassium bicarbonate, potassium citrate, potassium acetate, or potassium gluconate.

**PRECAUTIONS:** The diagnosis of potassium depletion is ordinarily made by demonstrating hypokalemia in a patient with a clinical history suggesting some cause for potassium depletion. In interpreting the serum potassium level, the physician should bear in mind that acute alkalosis per se can produce hypokalemia in the absence of a deficit in total body potassium while acute acidosis per se can increase the serum potassium concentration into the normal range even in the presence of a reduced total body potassium. The treatment of potassium depletion, particularly in the presence of cardiac disease, renal disease, or acidosis requires careful attention to acid-base balance and appropriate monitoring of serum electrolytes, the electrocardiogram, and the clinical status of the patient.

**Laboratory Tests:** Regular serum potassium determinations are recommended. In addition, during the treatment of potassium depletion, careful attention should be paid to acid-base balance, other serum electrolyte levels, the electrocardiogram, and the clinical status of the patient, particularly in the presence of cardiac disease, renal disease, or acidosis.

**Drug Interactions:** Potassium-sparing diuretics, see **WARNINGS**.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Long-term carcinogenicity studies in animals have not been performed.

**Pregnancy Category C:** Animal reproduction studies have not been conducted with K-DUR. It is also not known whether K-DUR can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. K-DUR should be given to a pregnant woman only if clearly needed.

**Nursing Mothers:** The normal potassium ion content of human milk is about 13 mEq per liter. Since oral potassium becomes part of the body potassium pool, so long as body potassium is not excessive, the contribution of potassium chloride supplementation should have little or no effect on the level in human milk.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:** One of the most severe adverse effects is hyperkalemia (see **CONTRAINDICATIONS**, **WARNINGS**, and **OVERDOSAGE**). There have also been reports of upper and lower gastrointestinal conditions including obstruction, bleeding, ulceration, and perforation (see **CONTRAINDICATIONS** and **WARNINGS**); other factors known to be associated with such conditions were present in many of these patients.

The most common adverse reactions to oral potassium salts are nausea, vomiting, abdominal discomfort, and diarrhea. These symptoms are due to irritation of the gastrointestinal tract and are best managed by taking the dose with meals or reducing the dose.

Skin rash has been reported rarely.

**OVERDOSAGE:** The administration of oral potassium salts to persons with normal excretory mechanisms for potassium rarely causes serious hyperkalemia. However, if excretory mechanisms are impaired or if potassium is administered too rapidly intravenously, potentially fatal hyperkalemia can result (see **CONTRAINDICATIONS** and **WARNINGS**). It is important to recognize that hyperkalemia is usually asymptomatic and may be manifested only by an increased serum potassium concentration and characteristic electrocardiographic changes (peaking of T-waves, loss of P-waves, depression of S-T segment, and prolongation of the QT-interval). Late manifestations include muscle-paralysis and cardiovascular collapse from cardiac arrest.

Treatment measures for hyperkalemia include the following:

1. Elimination of foods and medications containing potassium and of potassium-sparing diuretics.  
2. Intravenous administration of 300 to 500 mEq/hr of 10% dextrose solution containing 10–20 units of insulin per 1,000 ml.

3. Correction of acidosis, if present, with intravenous sodium bicarbonate.

4. Use of exchange resins, hemodialysis, or peritoneal dialysis.

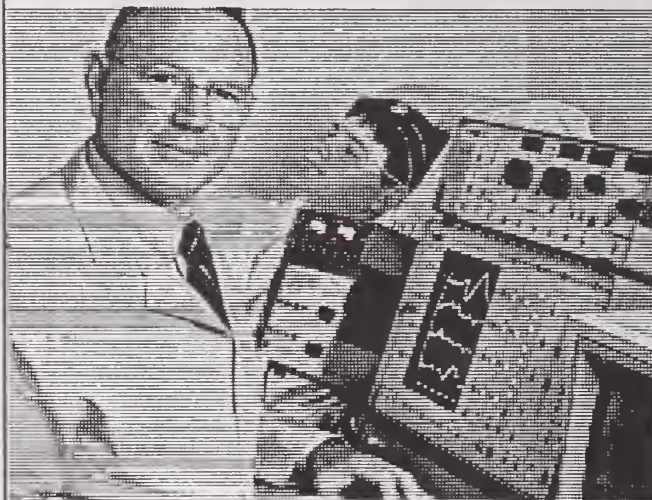
In treating hyperkalemia, it should be recalled that in patients who have been stabilized on digitalis, too rapid a lowering of the serum potassium concentration can produce digitalis toxicity.

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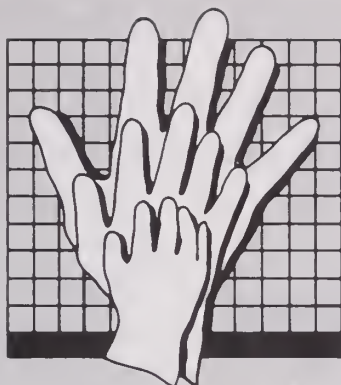
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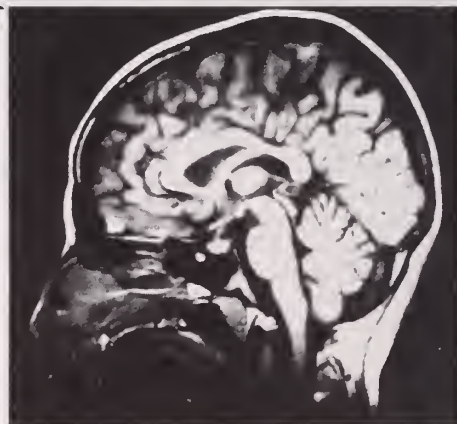
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### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

## THE LAST WORD

■ **Who will replace Mark R. Johnson, MD, as editor-in-chief of the OSMA *Journal*?** The speculation and uncertainty will end on August 21, when the Board of Trustees is scheduled to appoint a successor. The search for a qualified individual began in April, when Dr Johnson announced his intention to resign his post next month, bringing to a close his twentieth year of service. As articulate as he is passionate, MRJ has delighted, dismayed, and thoroughly entertained his readers for two memorable decades. His will be a tough act to follow.

■ **A hearty thank you goes out to those Oklahoma physicians who contributed to the primary campaign of AMA trustee Jerald R. Schenken, MD.** Dr Schenken, a Nebraska pathologist, won the Republican nomination for a seat in the US House of Representatives. He defeated three other candidates to gain the nomination and will face a former Nebraska state senator in the November general election.

■ **OK INCH, Oklahomans for Improvement of Nursing Care Homes**, an advocacy group established last fall, is seeking the support of retired doctors or those nearing retirement. The non-profit organization, headed by President JoAnna Deighton, Norman, welcomes any ideas or assistance in upgrading those nursing homes in the state that may be substandard. Membership is \$5 a year and entitles the member to minutes and newsletters. The mailing address for OK INCH is PO Box 5658, Norman, OK 73070.

■ **James W. Loy, Chickasha, has received two awards recently.** The first is the Donald J. Blair Friend of Medicine Award, presented by the Oklahoma State Medical Association to the layman who has done the most to further medicine in the community or state. The other is the Alexander Poston Leadership Award, given by the Oklahoma City Clinic to recognize leadership in the medical field. Loy has served the community of Chickasha and its physicians since 1955, first as administrator of the Chickasha Hospital and Clinic and then as administrator of the new Grady Memorial Hospital. He continues as administrator of the clinic, now known as Southern Plains Medical Center. Loy was a founder and president of the Oklahoma Medical

Group Manager's Association and currently is president of the Medical Group Managers Association of America and a member of its Board of Directors.

■ **State golfers are reminded that the American Lung Association of Oklahoma is again offering its Golf Privilege Card.** The card, available for just \$10, entitles the bearer to play more than 50 different golf courses around the state without paying a green fee. Included are the nine state park courses: Arrowhead, Fountainhead, Hochatown-Cedar Creek, Fort Cobb, Lake Murray, Lake Texhoma, Quartz Mountain, Roman Nose, and Sequoyah. Money raised will help in the fight against lung disease. To order, send \$10 per card to ALA of Oklahoma, PO Box 53303, Oklahoma City, OK 73152. For additional information call (405) 524-8471.

■ **This year's A.H. Robins Award for Community Service** has been presented to George W. Prothro, MD, Tulsa. Dr Prothro was medical director of the Tulsa City-County Health Department for many years and recently retired as a member of the faculty at University of Oklahoma Tulsa Medical College. He was recently named to the Board of Directors of the American Lung Association.

■ **Ronald M. Kingsley, MD, Oklahoma City** ophthalmologist, has become the first recipient of the Edward and Thelma Gaylord Faculty Honor Award. The award has been established to honor a University of Oklahoma College of Medicine faculty member for his or her outstanding medical teaching ability. Dr Kingsley, a specialist in macular and retinal vascular disorders, was selected for the award by nine residents in the college's Department of Ophthalmology.

■ **The *Journal* staff was saddened last month to learn of the death of artist Joe D. Trotter, 48,** a member of the creative team that supplies the *Journal's* cover art. Joe joined the staff at Graphic Art Center over three years ago, lending his talent and dedication to the monthly task of producing yet another *Journal* design. That made him a member of our team, too, and we'll miss him. □



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**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal tendency in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may mask action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dose to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100; Prescription Paks of 50.



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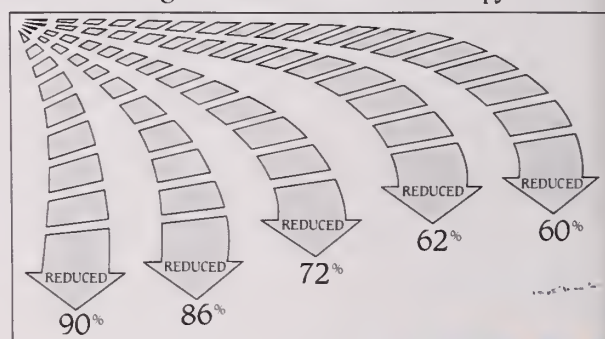
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And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose<sup>1</sup>
- ➡ First-week reduction in somatic symptoms<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy\*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION  
\*Patients often presented with more than one somatic symptom.

## Limbitrol<sup>®</sup>

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

## Limbitrol DS<sup>®</sup>

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

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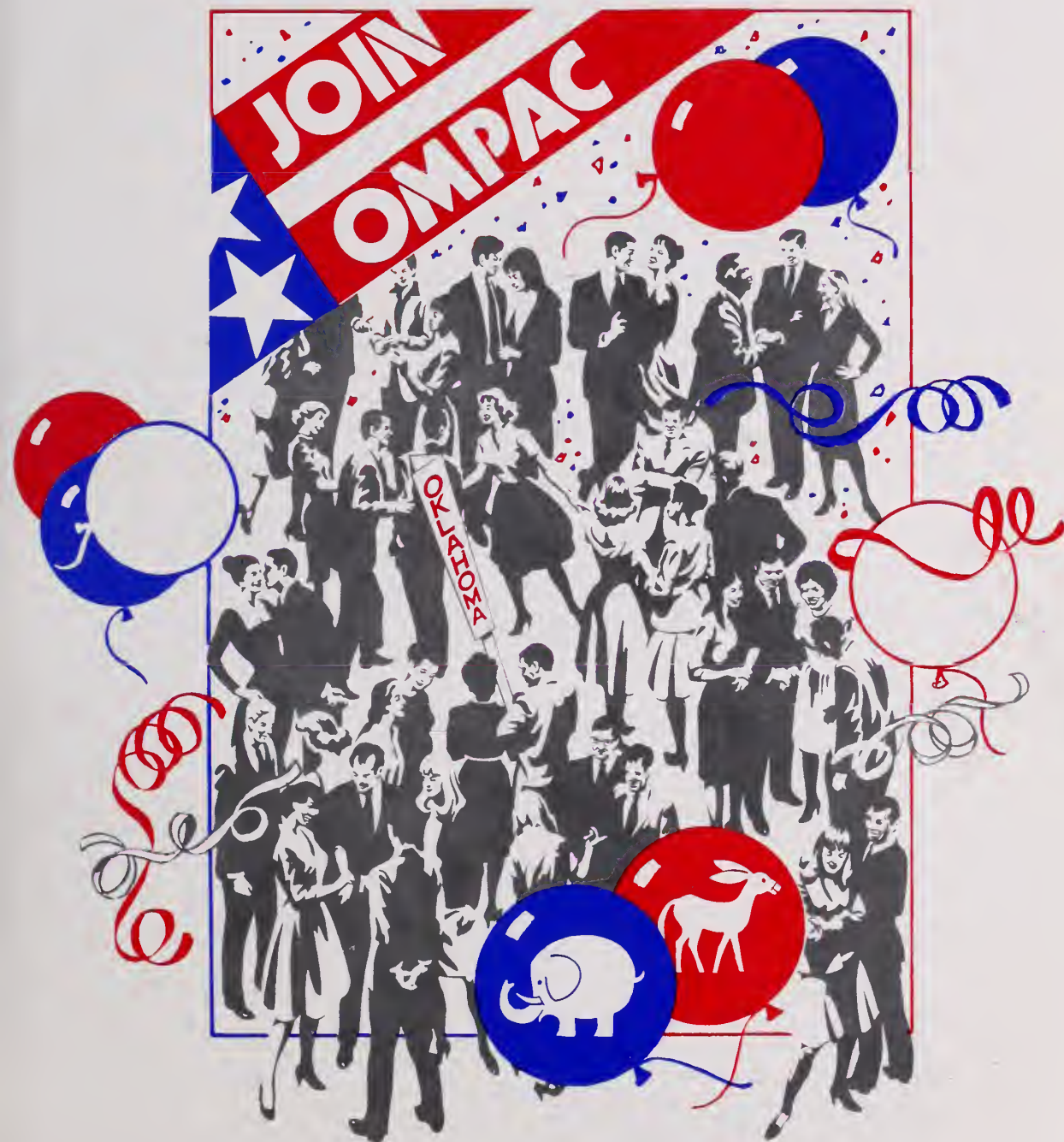


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  - urinary tract<sup>†</sup>
  - skin/skin structure<sup>†</sup>
  - bones and joints<sup>†</sup>
- Convenient *B.I.D.* dosage – 250 mg, 500 mg and 750 mg tablets

\**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

<sup>†</sup>Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO® SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



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Please see adjacent page of this advertisement for Brief Summary of Prescribing Information.



# Cipro<sup>®</sup> TABLETS (ciprofloxacin HCl/Miles)

■ 500 mg B.I.D. for most infections;  
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## BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro<sup>®</sup> is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below.

**Lower Respiratory Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*.

**Skin and Skin Structure Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*.

**Bone and Joint Infections** caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*.

**Urinary Tract Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*.

**Infectious Diarrhea** caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei*\* when antibacterial therapy is indicated.

\*Efficacy for this organism in this organ system was studied in fewer than 10 infections. Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro<sup>®</sup> may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

### CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

### WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

### PRECAUTIONS

#### General

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of human animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

#### Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

#### Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness, therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

#### Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below.

- Salmonella/Microsome Test (Negative)
  - E. coli* DNA Repair Assay (Negative)
  - Mouse Lymphoma Cell Forward Mutation Assay (Positive)
  - Chinese Hamster V<sub>79</sub> Cell HGPRT Test (Negative)
  - Syrian Hamster Embryo Cell Transformation Assay (Negative)
  - Saccharomyces cerevisiae* Point Mutation Assay (Negative)
  - Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
  - Rat Hepatocyte DNA Repair Assay (Positive)
- Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results:
- Rat Hepatocyte DNA Repair Assay
  - Micronucleus Test (Mice)
  - Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

#### Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

## CONVENIENT B.I.D. DOSAGE

### Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg B.I.
Bone and Joint*	Mild/Moderate	500 mg B.I.
Skin/Skin Structure*	Severe/Complicated	750 mg B.I.
Urinary Tract*	Mild/Moderate	250 mg B.I.
	Severe/Complicated	500 mg B.I.
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg B.I.

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

#### Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

#### Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

### ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical quinolone events are italicized.

**GASTROINTESTINAL** (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

**CENTRAL NERVOUS SYSTEM** (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

**SKIN/HYPERSENSITIVITY** (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

**SPECIAL SENSES** blurred vision, disturbed vision, (change in color perception, overbrightness of light, decreased visual acuity, diplopia, eye pain, tinnitus, bad taste).

**MUSCULOSKELETAL** joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout, renal/urogenital: interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleed, vaginitis, acidosis.

**CARDIOVASCULAR** palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

**RESPIRATORY** epistaxis, laryngeal or pulmonary edema, hiccup, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

**Adverse Laboratory Changes.** Changes in laboratory parameters listed as adverse events without regard to relationship:

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anem, bleeding diathesis, increase in blood monocytes, and leukocytosis.

### OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

### DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours. Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours. In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

### HOW SUPPLIED

Cipro<sup>®</sup> (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

\* Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

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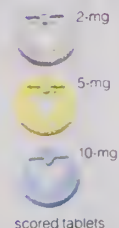
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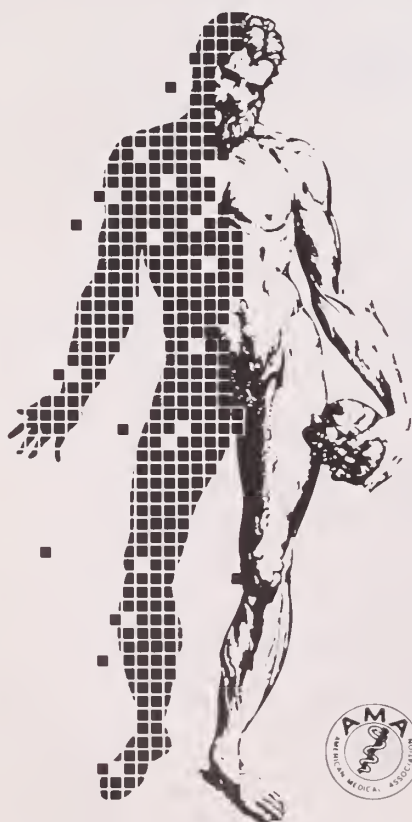
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# JOURNAL

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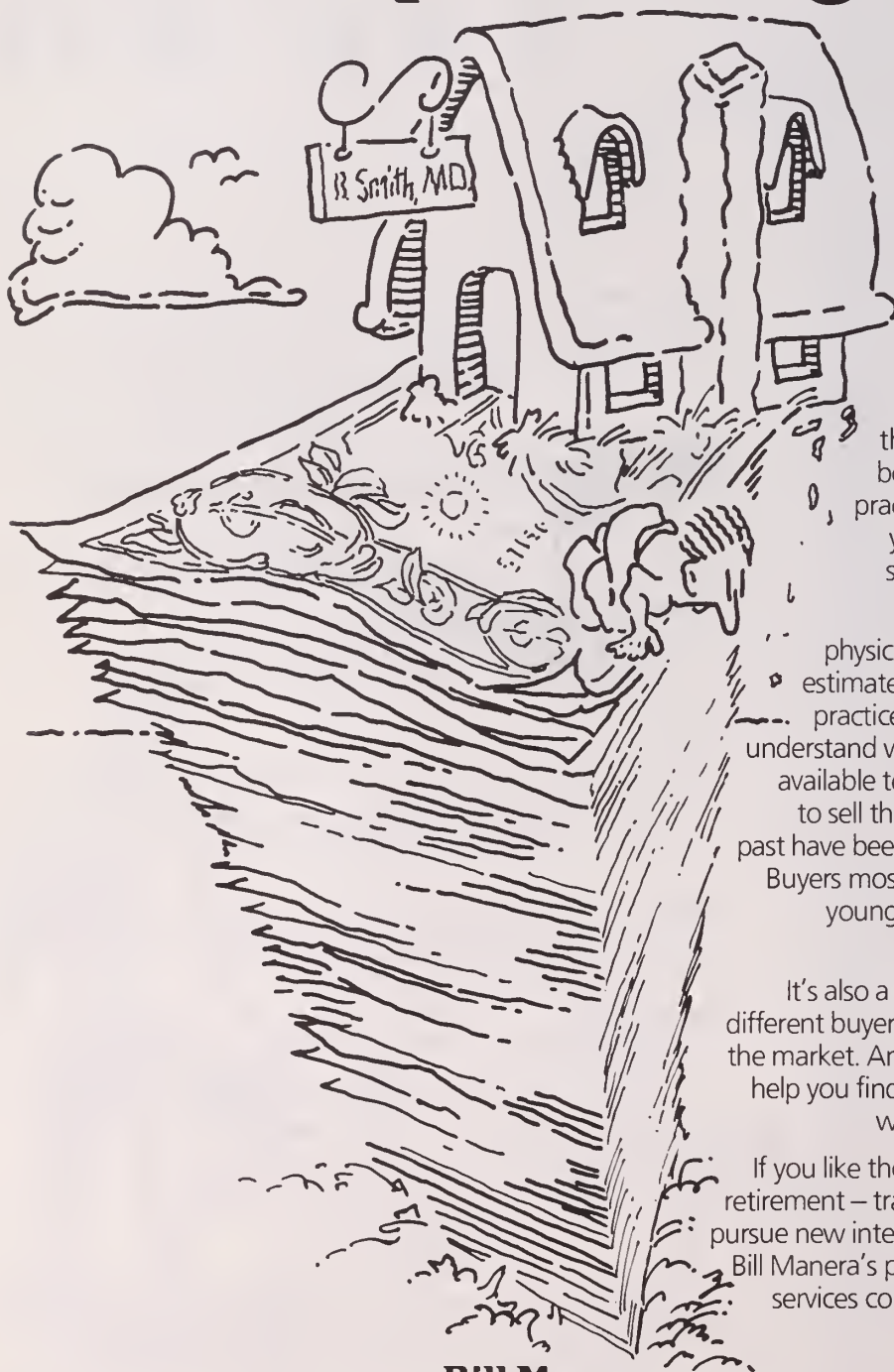
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The 1988 political campaigns are underway, and the Oklahoma Medical Political Action Committee (OMPAC) is offering physicians another way to get involved. See pages 528 and 546.  
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**Contraindication:** Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H<sub>2</sub>-receptor antagonists.

**Precautions:** General—1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

**Laboratory Tests:** False-positive tests for urobilinogen with Multistix<sup>®</sup> may occur during therapy with nizatidine.

**Drug Interactions:** No interactions have been observed between Axid and theophylline, chloridazepoxide, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system; therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, prenatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

**Pregnancy—Teratogenic Effects—Pregnancy Category C:** Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers:** Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**Use in Elderly Patients:** Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

**Adverse Reactions:** Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs <0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events were also reported; it was not possible to

determine whether these were caused by nizatidine.

**Hepatic:** Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase) occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

**Cardiovascular:** In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

**Endocrine:** Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

**Hematologic:** Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H<sub>2</sub>-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

**Integumental:** Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

**Other:** Hyperuricemia unassociated with gout or nephrolithiasis was reported.

**Overdosage:** There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD<sub>50</sub> values in the rat and mouse were 301 mg/kg and 232 mg/kg, respectively.

Axid<sup>®</sup> (nizatidine, Lilly)



**Eli Lilly and Company**  
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46285

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### A Surplus of Shortages

While the debates drone on about surpluses and shortages of physicians and whether there will be too many or too few pediatricians or thoracic surgeons practicing in Centerville by the year 2000, I wonder if anything is being done about the surpluses of physicians who fall short of being worthy of the title. There are more and more of them these days, and the places they're coming from should stop production immediately. The physicians I'm talking about are the ones who are

- totally ignorant of medical ethics, professional courtesies, and the laws that govern the practice of medicine
- looking for a 40-hour-(or less)-a-week job that will replace a commitment to patients, a practice, and a profession
- more concerned with protecting themselves than being honest with their patients and conserving their patients' resources
- willing to compromise what they believe is best for their patients with what some mouth says an insurance company will pay for or "approve"
- unwilling to talk with or even listen to patients or their families

- unable or unwilling to make friends of their patients
- "market oriented" rather than patient oriented

And while this surplus seems to be expanding, there are growing shortages of certain other physicians. These are the ones who

- serve as role models for students, peers, and younger colleagues
- possess and demonstrate the attributes of a scholar
- have the courage to expose dishonest, unethical, and incompetent colleagues
- have the devotion to assume the task of leadership
- possess the humility required to achieve greatness

The place that used to produce these physicians must have gone out of business several years ago. Today the species is almost extinct.

While we're about it, maybe we should try to do something about *these* surpluses and shortages.

—MRJ

## PRESIDENT'S PAGE

United States citizenship is conferred on most of us by the accident of our birthplace, a political grace given by nature on a geographical basis. Many Americans, with time, develop an appreciation of the peerless liberty and opportunity for personal development inherent in US citizenship. A key element of the necessary history lesson occurs when we learn that every generation, for two hundred years, has been required to protect, preserve, and renew both the liberty and the opportunity — sometimes with blood.



Constantly, despotic ideologies and the forces of statism in our own government erode and eat away at the basis of the American creed, like sulphuric acid attacking a metal. In gratitude and in self-defense each of us should do what we can to neutralize the acid and re-strengthen the metal so that our children and grandchildren may also receive the grace of United States citizenship.

We are citizens daily, and not merely in times of crisis. Whether we are good citizens or bad citizens depends on our consistent effort in the continuing governing process.

Medicine as a profession has little to be ashamed of and much to be proud of in the history of the American way of life. In war and in peace, the physician's knowledge and hands have been made available to America's soldiers and to America's poor. Most Americans get good medical care most of the time, despite the propaganda sometimes heard to the contrary.

But the United States is a democratic republic, and the system depends on individual participation in the solution of present problems. While the nature of the issues varies with time, the need for a broad citizen input into problem solution is constant in a republic. The validity of the solutions is based on the breadth of the contributions.

The Oklahoma State Medical Association has an active posture in the communication between physicians and government, and the Oklahoma Medical Political Action Committee is an effective

agent for Oklahoma physicians. Good citizenship for an Oklahoma physician may well include work with OSMA, and support of the association's political action committee — for starters!

The citizen-physician will also look closely at the local political races for state senator and representative, county commissioner, and sheriff, and develop an informed opinion of the philosophy and integrity of the candidates. Some of these races may need support, directly or indirectly, with money and time. An attribute of good citizenship is to aid in the election of candidates who are philosophically compatible, and to inform them of medicine's capabilities and problems.

The county or district medical society should consider having a "candidates forum" meeting early in the campaign season. Personal, informal contact between candidates and physicians during the campaign facilitates positive contact later. If equal opportunity is offered, most candidates are eager for such an opportunity, and both physicians and candidates benefit.

After the election is over, the good citizen maintains contact with the elected officeholder, to be aware of issues to be resolved and to offer medical knowledge for the decisions that the official must make. Every office from county commissioner to the President of the United States has need of advice on medical decisions. At any level, the officeholder is most receptive to those who helped the election. The physician who helps the candidate and continues sound, unobtrusive consultation availability will have a positive influence on the processes of government.

All levels of government badly need the wisdom and knowledge of the medical profession, and many medico-social problems of today stem from a political failure to hear timely medical advice. The politicians need to know that we will be helpful in a public-spirited manner. Let us be active at a level that will improve our government. We owe it to our forefathers and to our grandchildren.

We have a republic; let us make it work.

*Ray V. McIntyre, M.D.*

# Ten Caveats in the Early Management of Acute Epiglottitis in Children

Thomas D. Tinker, MD; Teresa M. Stacy, MD

*Acute epiglottitis, a bona fide airway emergency, is infrequently encountered by most primary care physicians. However, if a few simple precepts are followed during its early management, significant morbidity and mortality can be averted.*

**E**piglottitis, a true airway emergency, usually afflicts children two to six years of age. Because other causes of airway obstruction such as foreign body aspiration, laryngotracheobronchitis (croup), retropharyngeal abscess, and congenital anomalies also occur in this age group, the correct diagnosis is imperative and will determine the treatment of choice. This paper focuses on the appropriate, early "field" management of acute epiglottitis (AE) and contrasts it with croup and foreign body aspiration.

Listed below are eight statements regarding the management of AE. Each is to be answered true or false and will aid the primary care physician in assessing his/her knowledge about how appropriate care for patients with AE is rendered.

1. Arterial blood gas results are essential in the early, appropriate management of patients with AE. *T or F?*

2. When the diagnosis of AE is uncertain, the patient in severe respiratory distress should be sent to x-ray for confirmation. *T or F?*

3. Nebulized racemic epinephrine is an integral component of early airway management in patients with AE. *T or F?*

4. A normal-size epiglottis on lateral x-ray taken with a portable x-ray unit rules out the diagnosis of AE. *T or F?*

5. The lateral position is preferred by patients with AE because the work of breathing is minimized in this position. *T or F?*

6. Bag and mask ventilation is almost impossible in children with AE because the epiglottis essentially occludes the glottic aperture. *T or F?*

7. Acute epiglottitis rarely, if ever, occurs in children under two years of age and has not been reported in adults. *T or F?*

8. When the diagnosis of AE is certain, the patient should routinely be intubated in the emergency room to secure the airway. *T or F?*

## EPIGLOTTITIS

Epiglottitis, an acute, life-threatening source of upper airway obstruction, usually results from infection of the supraglottic structures (ie, epiglottis, uvula, and aryepiglottic folds. Figs 1 and 2) with *Hemophilus influenzae*, type B. In most cases the epiglottis is cherry red and swollen, but it may be of normal size. When the size is normal, it is the marked inflammatory edema of contiguous supraglottic structures that produces airway obstruction; hence, the name supraglottitis may be more appropriate.

Although the patient is usually two to six years of age, cases in adults<sup>1</sup> and in children under two

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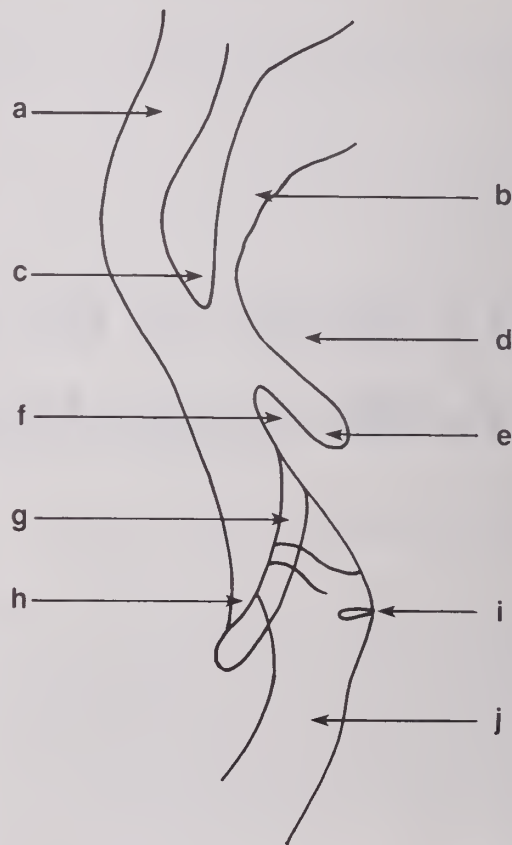


**Figure 1.** (A) Normal lateral upper airway. Epiglottis is of normal size and aryepiglottic folds thin. (B) Key to normal lateral upper airway.

years<sup>2,3</sup> are reported. The child with AE usually presents with upper airway obstruction after only a few hours of symptoms. Common symptoms include dysphagia, dysphonia, drooling, dyspnea (the "Four Ds"),<sup>4</sup> and a high fever (often greater than 39°C) without antecedent coryzal illness or cough. In children less than two years of age, a coexisting cold or "barking" cough of several days' duration may be present;<sup>3</sup> therefore, a high index of suspicion must be maintained if AE is to be diagnosed. Symptoms usually worsen progressively, and in a few hours, the patient appears toxic and listless and is reserving his energy to overcome the increased work of breathing associated with his airway obstruction. "Reduced airflow produces only muffled stridor at the vocal cords and little coughing. Dysphonia, and later aphonia, characterize acute epiglottitis and are manifestations of diminished to no airflow."<sup>4</sup> Auscultation of the lungs may reveal minimal air movement.

To maximize his airway, the child may assume a posture that is virtually pathognomonic of AE.<sup>2</sup> He sits erect, flexed forward at the waist with tripod placement of his arms to provide support. The neck is slightly flexed with the chin thrust forward; the mouth is wide open and the tongue protruding. The act of thrusting the chin forward displaces the epiglottis anteriorly, away from the glottic opening, thereby decreasing airway obstruction. (Note: this

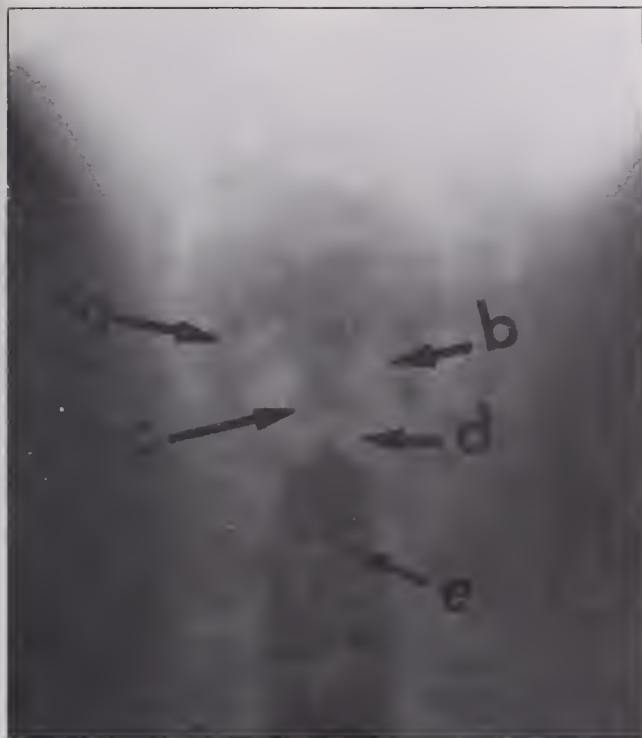
## NORMAL LATERAL UPPER AIRWAY



- |                   |                        |
|-------------------|------------------------|
| a. nasopharynx    | f. epiglottis          |
| b. oropharynx     | g. aryepiglottic fold  |
| c. uvula          | h. pyriform sinus      |
| d. base of tongue | i. laryngeal ventricle |
| e. vallecula      | j. trachea             |

protective posturing will be absent in the very young child who sits alone poorly and is another reason why a high index of suspicion must be maintained for AE in the very young.) Efforts to place the child supine for examination are vigorously resisted by the child and are discouraged because placement in this position may precipitate acute airway closure. Dysphagia with AE may be severe enough to preclude the child's swallowing his own saliva; in the supine position, pooling of secretions may provoke laryngospasm and complete airway obstruction, or lead to aspiration.

Because the clinical course of epiglottitis is acute and fulminant, the patient must receive 100% oxygen from the moment the diagnosis is suspected, and someone skilled in airway management alerted. In the emergency room, all measures to keep the patient



**Figure 2.** Anteroposterior view of normal upper airway. Note: a. pyriform sinus, b. false cord, c. laryngeal ventricle, d. true cord, e. subglottal trachea. Blunt upper margin of tracheal air column (adjacent to true cords) is obliterated in croup (Fig 4, AP view) by subglottic soft tissue inflammation.



**Figure 3.** Lateral neck film of patient with acute epiglottitis. Characteristic radiographic feature is a grossly swollen, thumb-sized epiglottis. Aryepiglottic folds are also swollen.

calm must be taken. This includes leaving the child in his parent's lap if this is where he is most comfortable. The parent can reassure the distressed child and thereby minimize airway collapse from agitation. Again, the patient's posturing is airway-protective and should be maintained as 100% oxygen is inspired while preparations are made in the operating room to secure the patient's airway. Although the diagnosis can be made in a large percentage of cases by pharyngoscopy, do not examine the patient's pharynx with a tongue blade. This may precipitate laryngospasm. In older patients, the inflamed epiglottis is sometimes visualized simply by having the patient open his mouth. Do not attempt to draw blood or start an intravenous line. These maneuvers will agitate the child and increase the chances of complete airway obstruction.

Some practitioners, electing to avoid the potential for laryngospasm with pharyngoscopy, advocate the early use of lateral neck x-rays for noninvasive differentiation of AE and croup.<sup>5</sup> Although the use of portable x-ray units is encouraged by some, they often produce inferior radiographs, and reliance upon them to give x-rays of diagnostic quality is discouraged (personal communication). In AE, the

swollen epiglottis may produce a supraglottic "thumb" sign on lateral neck x-ray (Fig 3). Subglottic tracheal lumen narrowing caused by edematous mucosa (ie, the "church steeple" sign, Fig 4) is seen commonly on anteroposterior (AP) neck radiographs in croup. The same subglottic narrowing is present in 25% of patients with AE when AP films are examined.<sup>6</sup> Hypopharyngeal dilatation is a nonspecific finding with airway obstruction and is found in both AE and croup.<sup>4</sup>

Diaz has reported that airway obstruction is exacerbated in a significant number of patients during x-ray procedures because of cervical hyperextension and interference with protective postures.<sup>7</sup> In the same study,<sup>7</sup> a false negative rate of 70% was found when x-rays were used to diagnose AE (ie, in 14 of 20 patients with laryngoscopy-verified epiglottitis, the epiglottis appeared normal-sized on lateral neck radiographs). This is inconsistent with the clinical experience of two senior pediatric radiologists at Children's Hospital of Oklahoma who feel that a low incidence of false negatives (ie, less than 5%) exists when proper equipment and technique (with patients sitting and film taken during a deep inspiratory effort) are employed. It is their contention





**Figure 4.** Anteroposterior (A) and lateral (B) neck films of patients with croup. The characteristic radiographic feature is symmetrical narrowing of the subglottic air shadow, the "church steeple" sign.

that when x-rays are taken in the radiology suite with appropriate personnel and airway equipment at hand and special care is taken not to disturb the patient's protective posture, diagnostic radiographs can be obtained a high percentage of the time without jeopardizing patient safety. Therefore, unless the above conditions can be satisfied, it is prudent to remember that lateral neck films, in the patient with acute airway obstruction, may be nondiagnostic (ie, a "normal" lateral neck x-ray may not rule out AE, particularly if a portable x-ray unit is in use), time-consuming, and even harmful. Conservative clinical judgment is warranted. When equivocal radiographs are obtained, the patient should be taken to the operating room for diagnostic laryngoscopy. Equipment for immediate ventilation, intubation, and tracheostomy should accompany the patient wherever he goes. The essentials include an oxygen tank (full and open), a Mapleson circuit with appropriate size mask, laryngoscope, appropriate size endotracheal tubes (Table 1),<sup>2</sup> portable suction, atropine (0.02mg/kg), and a tracheostomy tray at the patient's bedside.

As previously stated, continuous administration of 100% oxygen by mask is an integral component of

appropriate early management in AE. Nebulized racemic epinephrine does *not* relieve airway obstruction from supraglottic edema, so its use is not indicated.<sup>4,8</sup> Arterial blood gas analysis is not routinely performed prior to securing the airway because the skin puncture may upset the child and aggravate airway obstruction. However, it should be borne in mind that hypercarbia and some degree of hypoxemia probably exist.

Definitive placement of the artificial airway ideally occurs in the operating room where controlled intubation under deep general anesthesia with the patient spontaneously breathing can be accomplished.<sup>4</sup> Intubation in the emergency room should occur only in special circumstances, ie, in patients with respiratory arrest or severe bradycardia. Despite the inspiration of high oxygen concentrations, cyanosis may occur because tissue oxygen demands are high at a time when alveolar oxygen supply is restricted by upper airway obstruction.<sup>4</sup> Fatigue may supervene rapidly as the work of breathing increases and air movement diminishes. Provision for adequate oxygenation and ventilation must be made or cardiopulmonary arrest can occur. If complete airway obstruction or cardiac arrest occurs, jaw thrust with



**Table 1. Recommended Tube Sizes for Patients with Acute Epiglottitis<sup>2</sup>**

Age	Tube size (I.D.) <sup>*†</sup> mm
0-6 months	3.0
6 months - 2 years	3.5
2 years - 4 years	4.0
Over 4 years	4.5

<sup>\*</sup>These orotracheal tube sizes are 0.5 to 1 mm smaller in diameter than is usual for age. The small diameter tube secures a patent airway and avoids the possible serious laryngeal complications (ie, subglottic stenosis) that may follow placement of an oversized tube.

<sup>†</sup>Formula for calculating average size tube for children 12 months to 10 years<sup>11</sup>:  

$$\text{I.D. (mm)} = \frac{\text{age(yr)} + 16}{4}$$

**Table 2. Downes Scoring System for Upper Airway Obstruction<sup>11</sup>**

Physical Finding	Score		
	0	1	2
Stridor	None	Inspiratory	Inspiratory and expiratory
Cough	None	Hoarse cry	Bark
Retractions and nasal flaring	None	Flaring and suprasternal retractions	Flaring and suprasternal, subcostal, intercostal retractions
Cyanosis	None	In air	In 40% oxygen
Inspiratory breath sounds	Normal	Harsh, with wheezing or rhonchi	Delayed

head tilt in combination with mouth-to-mouth or bag-valve-mask ventilation and external cardiac compression can be instituted without causing the epiglottis to plug the glottis.<sup>3,9,10</sup> These should be replaced by an artificial translaryngeal or trans-tracheal airway when experienced personnel arrive.

Intubation should be attempted under direct laryngoscopy rather than by the blind nasotracheal route, so the friable epiglottis is not traumatized. Always preoxygenate the patient adequately by mask (for five minutes) before attempting intubation; in these patients, whose vital capacity is diminished because of decreased inspiratory reserve volume, saturation of their functional residual capacity (FRC) with oxygen is imperative. Loading the FRC with oxygen extends the period of apnea that the patient can tolerate safely during attempted intubation. Since the glottic opening may be unrecognizable during direct laryngoscopy, "careful midline observation for turbulent airflow causing tissue flapping or bubbling of oral secretions may pinpoint a glottis whose opening is occluded by edematous arytenoid cartilages and a distorted epiglottis."<sup>4</sup>

The patient who is stable in the emergency room should be accompanied to the operating room by someone skilled in airway management. He should remain on his parent's lap or sitting in the tripod position. All emergency airway equipment is transported with the patient to the operating room.

## CROUP

In contrast to AE, croup routinely occurs in children less than two years of age and accounts for the vast majority of patients with stridor. The illness is usually of viral rather than bacterial origin as in AE. Historically, the child with croup has an upper respiratory infection for several days and then devel-

ops inspiratory stridor and a harsh "barking" cough. The diagnosis can be made over the telephone by the experienced ear. The patient may have a low grade fever or none at all. Inspiratory suprasternal and substernal retractions may be present as may rhonchi, rales, or wheezing. The patient's stridor may be loud, highpitched, and musical, whereas it is often soft and harsh in AE.<sup>4</sup> Since airway inflammation in croup is subglottic, patients do not drool.

While racemic epinephrine is ineffective in relieving airway obstruction in AE, it is extremely effective in croup. In both groups of patients, supplementary, humidified oxygen is appropriate initial therapy. In combination with hydration and nebulized racemic epinephrine (a potent vasoconstrictor), the majority of patients with croup clinically improve without intubation. Downes has described a scoring system for evaluating the need for intubation in patients with croup (Table 2).<sup>11</sup> A normal score is zero; the maximum score is ten. When the score is greater than four, therapy is required. In a patient with a score greater than seven or who is not responding to medical management, the need for an artificial tracheal airway is imminent. Because the local vasoconstrictive effects of epinephrine are finite, the patient who improves after nebulized racemic epinephrine must be observed for several hours after the final treatment to rule out recurrence of airway obstruction.

## FOREIGN BODY ASPIRATION

With foreign body aspiration, the history is usually the best clue to the diagnosis. These children are usually less than five years of age; onset of upper airway obstruction is usually immediate rather than

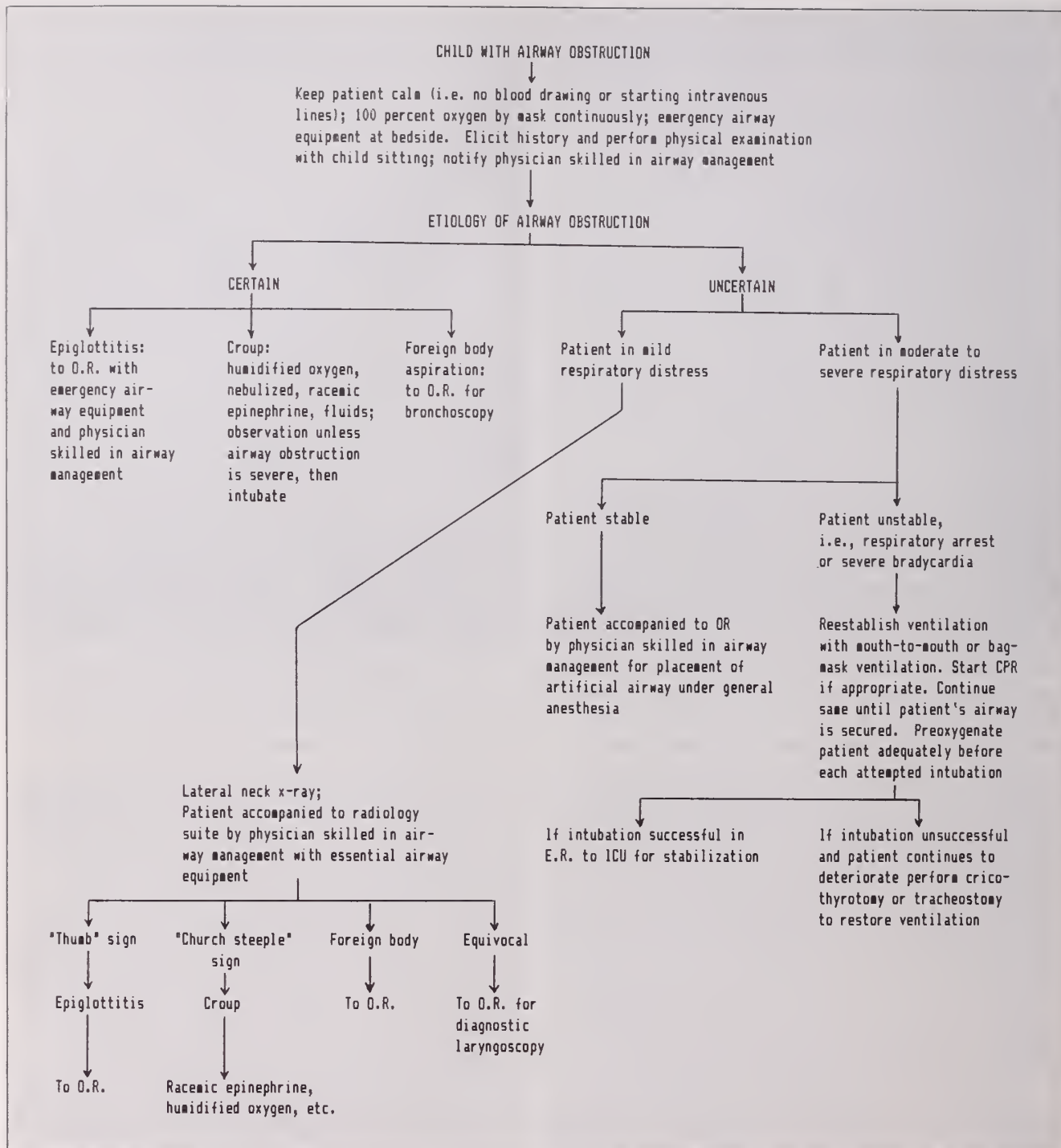


Figure 5. Flow diagram: Management of acute airway obstruction in epiglottitis.

acute as in epiglottitis. Though an occasional patient may have a cough, it is not of a "barking" quality as in croup. Dyspnea may be severe. Occasionally they may drool but, on laryngoscopy, the epiglottis and other supraglottic structures are normal. Lateral neck x-rays are normal or a foreign body may be present.

If a foreign body is aspirated, the object more commonly enters the right bronchus because of its less acute angle as the trachea bifurcates at the carina. Expiratory stridor is indicative of intrathoracic airway obstruction commonly seen with an endobronchial foreign body, whereas the inspiratory stridor of croup and AE implies an extrathoracic

obstruction.<sup>4</sup> In suspected cases of foreign body aspiration, there is usually ample time for radiographic studies, inhalation anesthesia, and therapeutic bronchoscopy.

## CONCLUSIONS

The eight statements presented earlier are false. They are intended to highlight some misconceptions that may exist among physicians who rarely are confronted with AE. In summary, the primary care physician who observes the following caveats will provide safe, expeditious care for the child with AE as he/she is en route to the operating room for controlled placement of an artificial airway under general anesthesia. The flow diagram suggests one approach to managing patients with acute airway obstruction secondary to epiglottitis (Fig 5).

**Caveat #1:** In the emergency room, when AE is suspected, do everything to keep the patient calm. Do not examine the pharynx with a tongue blade. Do not attempt blood drawing or intravenous line insertion. Allow one parent to remain with the child at all times.

**Caveat #2:** Provide 100% oxygen continuously by mask.

**Caveat #3:** In children less than two years of age, the index of suspicion for AE must remain high because the history may be atypical and classic physical findings may be absent (ie, tripod posturing).

**Caveat #4:** Have emergency equipment for establishing an airway at the patient's bedside (items listed in text). These must accompany the patient everywhere.

**Caveat #5:** The patient's tripod position is airway-protective. He should not be forced to change this position for any reason, lest airway obstruction acutely worsen.

**Caveat #6:** Do not take the patient in severe respiratory distress to x-ray. Do not leave this patient unattended. If x-rays are deemed necessary, portable units may be used in the emergency room, but such x-rays may be nondiagnostic. Therefore, patients going to x-ray should be accompanied by personnel skilled in airway management so that diagnostic quality x-rays can be obtained and patient safety maximized.

**Caveat #7:** If the patient's condition deteriorates, mouth-to-mouth or bag-valve-mask ventilation is effective in both the youngest and oldest patients with AE, so reestablish ventilation with same before attempting intubation.

**Caveat #8:** If intubation in the emergency room or radiology suite is mandatory, pre-oxygenate the patient with 100% oxygen *before each attempt*.

**Caveat #9:** Ideally, the patient is intubated in the operating room by an anesthesiologist or otolaryngologist.

**Caveat #10:** If the facilities and equipment to accomplish the above are not available, immediate arrangements for safe, expedient transport (eg, Medi-Flight) to a hospital, preferably a pediatric hospital, should be made.

Management in the operating room and intensive care unit are beyond the scope of this discussion, and therefore are not elaborated in the flow diagram for patient management. □

**Acknowledgment:** The authors wish to thank Glenda Hackett for typing the manuscript.

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# Procurement of Hearts for Valve Homografts: One Year's Experience

Diane J. Jones, PA-C; M. LaWaun Hance, PA-C; Paul Stelzer, MD; Ronald C. Elkins, MD

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*In an effort to provide human heart valves for transplantation, the Section of Thoracic Surgery at the University of Oklahoma has developed a self-sufficient procurement process and related educational outreach to medical professionals in Oklahoma.*

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**T**he supply of organs and tissues for transplantation in the United States falls far short of current demand because consent is obtained for only about 15% of the medically suitable potential donors.<sup>1</sup> This small percentage can be explained largely by the reluctance of medical professionals to approach families of potential donors.

Specific legislation, such as required request laws, coupled with education programs for the medical profession and the general public about the benefits of organ and tissue donation may help alleviate the shortage.<sup>2</sup>

In the meantime, a unique program has been established by the University of Oklahoma Health Sciences Center to assure the availability of homograft valves for transplantation. This gives Okla-

homa patients the option of homograft valves, generally considered superior to porcine or mechanical valves.

## PROCUREMENT PROGRAM METHODOLOGY

The initial efforts of the program included writing guidelines, organizing educational materials, and establishing working relationships with area hospitals and organ procurement agencies. Projected costs for equipment and personnel were determined, and proposals were drawn up for funding the program until it could become self-supporting.

The procurement program has been designed so that a procurement team of two surgeon's assistants is available at all times for dispatch from the Health Sciences Center. The team is uniquely self-sufficient and does not rely on hospitals for supplies or other support personnel. The team is available 24 hours a day for donor screening on the basis of established guidelines (Table 1). In the case of non-beating heart donors, the team notifies the donor hospital operating room to arrange for time. All necessary equipment is brought to the donor hospital in a custom-built trunk. Once at the hospital, the team is responsible for reviewing the chart, speaking with the donor's physician or nurse (and donor's family, when re-

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**Table 1. Guidelines for Consideration**

<b>Candidates:</b>	Non-beating heart donors within 12 hours of death or beating heart donors ineligible for living transplant
<b>Age Limit:</b>	Birth to 55 years
<b>Cause of Death:</b>	Criteria for rejection of a potential donor include: <ul style="list-style-type: none"> <li>— malignancy (with the exception of isolated CNS tumor)</li> <li>— syphilis</li> <li>— viral or toxic hepatitis</li> <li>— positive blood cultures</li> <li>— AIDS</li> <li>— valvular heart disease</li> <li>— penetrating cardiac trauma</li> <li>— previous heart surgery</li> </ul> Please note that any necessary labwork will be obtained at the time of organ recovery
<b>Consent:</b>	Signed by next of kin: <ul style="list-style-type: none"> <li>— standard operative consent form, or organ donation consent form if available, stating: "Removal of heart and great vessels for use of the valves for transplantation"</li> </ul>
<b>Time Limit:</b>	The heart can be removed up to 12 hours after death if the body is kept at a cool temperature

quested), transporting the donor, and performing the procedure.

## PROCEDURE

While one member of the procurement team completes the necessary paperwork, the other shaves and preps the donor's chest, then gowns to set up the back table and drape the donor. Draping is accomplished very carefully with the assistance of the nonsterile member, who must remain ungowned to pour solutions and attach the suction and saw to a power source for median sternotomy. Necessary blood samples are obtained and handed off the field, after which the second team member scrubs. Gowning of the second member is accomplished by the first using sponge forceps to pull the gown together and clamp it in the back.

After the cavae have been ligated, cardiectomy is performed obtaining good length on aortic and pulmonary conduits. The innominate, common carotid, left subclavian, and distal aorta are all ligated with umbilical tape prior to division. The right and left pulmonary arteries are transected at the first peripheral bifurcations, and the pulmonary veins are transected at their pericardial reflections.

Once removed, the heart is rinsed free of clot and



**Figure.** Donor screening brochure

is double bagged in lactated Ringer's solution. One team member breaks scrub to place the heart on ice and to minimize warm ischemic time. Sterile technique is no longer required, so both team members may participate in closure.

The donor is transferred to a morgue cart and is appropriately wrapped. All trash and linens are bagged, leaving the operating room ready for turnover by routine terminal cleaning. One team member makes the calls necessary to arrange heart pick-up and donor disposition while the other team member washes the instruments.

The same basic procedures are followed for beating heart donors. Most of these arrangements, however, are made by regional transplant coordinators.

## EDUCATION

One of the major goals of the procurement team is to heighten the awareness of medical professionals to donor screening requirements and the urgent need for donors. Most physicians and nursing personnel are unaware of the transplant potential of nonbeating hearts because of the previous widespread lack of interest in homograft valve transplantation.

A brochure containing donor screening requirements and other pertinent information was prepared for distribution to all residents and attending physicians (Fig). This brochure is also distributed for



Table 2. Discarded Valves

Reason	# of Valves
Nicked at dissection	3 pulmonary
Nicked at harvest	1 pulmonary
Fenestrations	2 aortic 1 pulmonic
Positive tissue culture	2 aortic 2 pulmonic
Congenital malformation	1 pulmonary

posting in emergency rooms and intensive care units throughout area hospitals so that nurses and physicians have ready access to screening requirements. Periodic inservices are scheduled in as many nursing units as possible to present donor screening requirements and to discuss the clinical significance of homograft valve replacements. Intraoperative photographs and schematic drawings are included in a slide presentation which is helpful in generating discussion.

Public education is also a goal which not only enhances the effectiveness of this program but increases awareness of organ donation in general. Posters with accompanying brochures are being prepared for distribution to area hospital waiting rooms and other prominent hospital locations. Presentations are also being made to various civic groups. All statewide organ and tissue procurement agencies cooperate through the Oklahoma Organ Donor Hotline to disseminate organ donor information throughout the state more efficiently. Requests for information can be directed to the toll-free number advertised by the hotline.<sup>3</sup> The hotline system conveniently gives health professionals a single number through which all potential organ retrievals can be arranged.

## RESULTS

The 33 donors procured between July 1, 1986, and July 1, 1987, ranged in age from 2 months to 50 years; the mean age was 22 years. There were 12 female and 21 male donors. There were 11 beating heart donors and 22 non-beating heart donors. There were 20 donors from within the Health Sciences Center and 13 donors from outside the center. Twelve valves were not suitable for transplantation (Table 2) and were utilized for training purposes.

## DISCUSSION

To date this program has provided an adequate selection of valve sizes for use here and has allowed the release of duplicate sizes to other institutions. It

has made possible the implantation of 27 homograft valves since July 1, 1986, a 300% increase from the 9 homograft valve transplants the previous year.


The self-sufficiency of the team is a cost-containing measure which has been readily accepted and appreciated by hospital administrators. Donor hospitals do not need to supply additional support personnel, which has made them more willing to identify potential non-beating heart donors as well as beating heart donors. Since members of the procurement team are part of the Thoracic Surgical Service and have daily patient care responsibilities, they have a vested interest in assuring the high quality of the tissue they procure.

## CONCLUSION

The increasing number of donor referrals suggests that the educational aspect of the program has been successful in creating awareness among the public and professionals of the need for organs. This, however, needs to be an ongoing effort due to the turnover of personnel and the apparent need to remind professionals to solicit donors.

## ADDENDUM

As of July 1, 1988 (2-year experience) this procurement project has resulted in over 150 donor referrals and 76 actual donor procedures.

A total of 73 homograft valves have been implanted in patients at the University of Oklahoma Health Sciences Center since November 1985. 

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# Indications for Heterotopic Heart Transplantation and Report on Two Patients

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*Two patients have undergone successful heterotopic heart transplantation; both remain alive and fully active over two years after transplantation. The indications for this operation are discussed, and previous experience reviewed.*

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**H**eterotopic heart transplantation (HHT) was first introduced into a clinical program by Barnard and Losman in Cape Town, South Africa, in 1974.<sup>1</sup> The operation involves the insertion of the donor heart as an accessory or auxiliary pump in the chest, the recipient's own heart remaining *in situ* (Fig 1). The procedure is technically more difficult than orthotopic transplantation and requires anastomoses of the two right atria, two left atria, aortae, and pulmonary arteries, with the latter anastomosis requiring the insertion of a synthetic (eg, Dacron) graft.<sup>2</sup>

HHT by this technique connects the donor heart in parallel with the recipient heart. Preferential flow to donor or recipient ventricle will be directly related

to the respective ventricular compliance (Fig 2). For example, should severe acute rejection develop in the donor heart, then the decrease in compliance which occurs will result in more blood passing through the recipient heart. Ejection of blood is asynchronous, depending upon the different heart rates, but does not substantially interfere with the performance of either heart.

In 1974, at a time before cyclosporine was available, loss of orthotopic donor heart function from severe acute rejection clearly resulted in death unless a second suitable donor became available immediately. Following HHT, the patient could remain alive supported by his own heart, even though the quality of life would inevitably be poor and he would require considerable supportive drug therapy, including possibly intravenous inotropic agents. The time gained, however, might allow survival until re-transplantation could take place.<sup>3,4</sup>

## INDICATIONS FOR HETEROTOPIC HEART TRANSPLANTATION

The improved immunosuppressive therapy which has become available during recent years, particularly the use of cyclosporine and to a lesser extent antithymocyte globulin and monoclonal antibodies,

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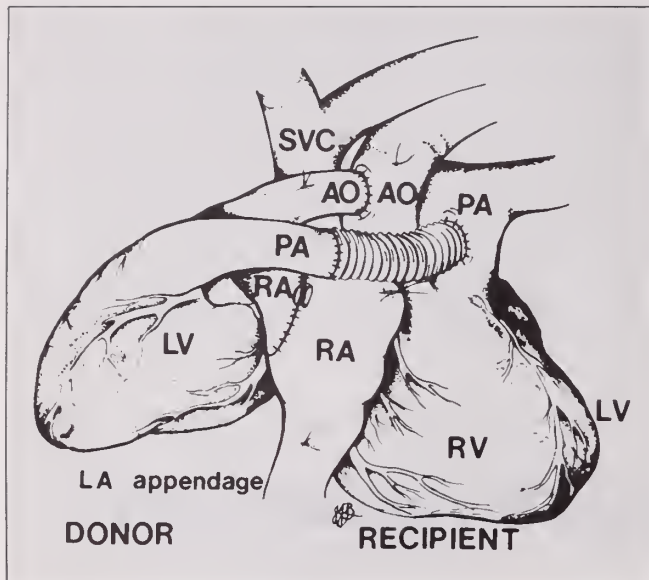


Figure 1. Heterotopic heart transplantation — completed operation.

has greatly reduced the incidence of graft failure from acute rejection. This has minimized the original major advantage of HHT, namely survival of the patient in spite of graft failure.

Nevertheless, HHT still has a role in certain specific conditions<sup>5</sup>:

1. Whenever there is any possibility of recovery of the recipient's own myocardium, eg, in acute myocarditis, then HHT should be preferred. If recovery occurs, the donor heart can be removed and immunosuppression discontinued.

2. When there is any possibility that initial donor heart function will be less than adequate to maintain the circulation alone. This could be expected most commonly when there is a large discrepancy in body mass between recipient and donor; though a small donor heart will eventually adapt to the demands made upon it, it might fail in the early post-transplant period unless the recipient heart remained *in situ* to lend some support. Similarly, when a donor heart has undergone a particularly long ischemic period during transportation and transplantation,<sup>6</sup> or for some other reason is deemed less than ideal (and yet the recipient's cardiovascular status is deteriorating so rapidly that survival until the next donor heart becomes available is not expected), then again HHT would seem to be advisable; the support given by the recipient heart in the early post-transplant period will allow time for recovery of the donor heart.

3. When the patient is suffering severe anginal attacks unresponsive to full medical therapy and unrelieved (where possible) by myocardial

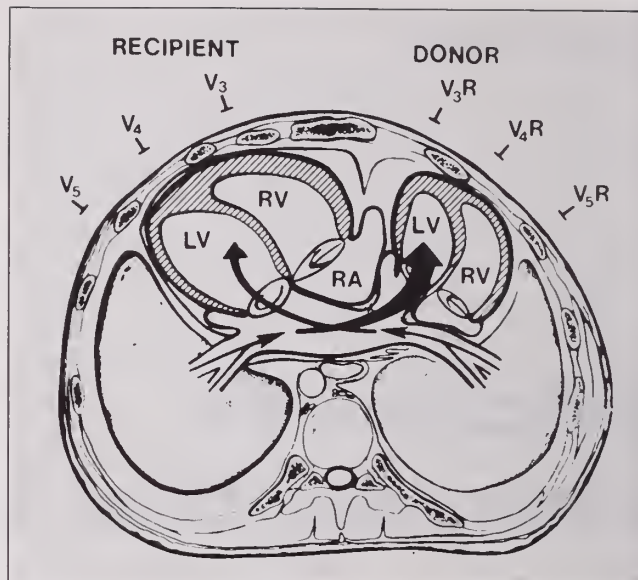


Figure 2. Diagram of transverse section through thorax of patient with heterotopic heart transplant. Donor heart is situated in right pleural cavity. (Sites of electrocardiographic electrode placement are also indicated). Blood flow from common left atrial chamber is governed by relative compliances of two left ventricles. Unless rejection of donor heart is occurring, compliance of donor left ventricle will be greater than that of diseased recipient left ventricle; blood in common left atrial chamber will therefore drain primarily to donor left ventricle.

revascularization procedures, and yet where left ventricular function continues to be good, it seems particularly contraindicated to excise the recipient heart and perform orthotopic heart transplantation (OHT). Following HHT, a well-functioning transplant would greatly diminish the demands on the ischemic recipient heart, thus reducing the severity of angina and yet retaining the support given by the recipient left ventricle.

4. In patients with left ventricular failure from ischemic or cardiomyopathic disease, HHT should be preferred to OHT whenever there is serious doubt that the right ventricle of the transplanted heart will be able to support the pulmonary circulation successfully. This would be suggested if the pulmonary vascular resistance were above 5 Wood units (400 dynes/sec/cm<sup>5</sup>) and showed no reversible element whatsoever (following the infusion of nitroprusside, nitroglycerine, prostaglandins, or the administration of 100% oxygen), or if the transpulmonary gradient (mean pulmonary artery pressure — pulmonary capillary wedge pressure) remained above 10 mmHg after an attempt to reduce it had been made by similar techniques. (In patients being considered for transplantation for congenital heart disease in whom there is a large left-to-right shunt which has resulted in a high pulmonary vascular



resistance, transplantation of the heart and both lungs will almost certainly be indicated.)

## CLINICAL EXPERIENCE OF TWO PATIENTS

We present brief details of two patients who have undergone this procedure.

**Patient I.** A 50-year-old man presented in 1985 with a 10-year history of severe angina. He had undergone at least two previous myocardial infarctions, and although he had had one episode of congestive heart failure in 1983, his major disability was severe and frequent chest pain, which had not responded to full medical therapy. Drug therapy consisted of nifedipine, verapamil, metoprolol, furosemide, potassium, nitroglycerin sublingually and transdermally, and sulindac.

Coronary angiography revealed diffuse atheromatous disease unsuitable for any form of myocardial revascularization procedure. His ejection fraction, however, remained at 48%, despite the presence of a small apical aneurysm. His relatively well-preserved ventricular function contraindicated orthotopic transplantation, and so, on May 30, 1985, he underwent HHT.

His immediate postoperative progress was excellent and he was able to be discharged from the hospital on the 15th postoperative day. Immunosuppressive therapy consisted of cyclosporine, azathioprine, and methylprednisolone. Some two weeks later he developed a large bloodstained pleural effusion, believed to have resulted from a complication of endomyocardial biopsy, which required drainage by thoracotomy. He made an uneventful recovery.

His subsequent progress has been good. He has experienced almost no anginal pain, though in January 1986 he underwent a myocardial infarction of the recipient ventricle with associated transient acute renal failure, from which he made a full recovery. Three years after HHT he remains fully active with excellent clinical hemodynamic function.

Recent cardiac catheterization confirms excellent donor left ventricular function, continuing moderate recipient left ventricular function, and a combined cardiac output of 7.5 l/min. (Table). Manipulation of the catheter into the donor right atrium and ventri-

Table. Cardiac Catheterization Data Obtained Two Years After Heterotopic Heart Transplantation in Two Patients

	PATIENT I		PATIENT II	
	Donor Heart	Recipient Heart	Donor Heart	Recipient Heart
Right atrium*	Not Entered	Not Recorded	Not Entered	3
Right ventricle	Not Entered	30/8*	Not Entered	34/2
Pulmonary artery	Not Entered	30/17	Not Entered	34/18
Left ventricle	175/12	175/28	140/14	135/6
Aorta	175/100		140/100	
Cardiac output		7.5 l/min.		4.1 l/min.
Coronary arteriography	Normal	Diffuse atheroma	Normal	Normal
Left ventriculography	Normal	Moderate hypokinesia	Normal	Global hypokinesia

\*All pressures recorded in mmHg

cle, however, proved impossible, suggesting some stenosis of the right atrial anastomosis or possibly even thrombosis of the donor right heart.

The patient's circulation, therefore, is supported largely by the donor left ventricle and the native right ventricle (a set of circumstances similar to the first two HHT patients in Cape Town in 1974,<sup>1</sup> one of whom remained well for over 10 years until he died of chronic rejection). Blood returning from the venae cavae is directed predominantly through the recipient right atrium and ventricle to the lungs, returning to the recipient left atrium, from where it passes predominantly to the donor left atrium and left ventricle (as the donor left ventricular compliance is greater) and then on into the aorta.

**Patient II.** This 35-year-old woman presented with a one-month history of shortness of breath and a tight feeling in her chest. Her heart was noted to be large, and she was showing signs of renal failure from low cardiac output. Cardiac catheterization revealed normal coronary arteries with generalized hypokinesia of the left ventricle and minimal mitral regurgitation consistent with a cardiomyopathy. Left ventricular ejection fraction was recorded as only 20%, and left ventricular end-diastolic pressure was 25 mmHg. Endomyocardial biopsy showed features indicative of a myocarditis.

As there appeared to be some possibility that her myocarditis might recover, she underwent HHT on June 4, 1985, and was discharged on July 5, 1985 (Fig 3). Her subsequent progress has been excellent, though on February 6, 1986, she had a syncopal attack and was noted to have ventricular fibrillation



of her native heart; this responded to cardioversion. She remains fully active three years after her operation.

As with Patient I, some difficulty has been experienced in obtaining endomyocardial biopsies from the donor right ventricle, as it has proved difficult to manipulate the catheter successfully through the right atrial anastomosis. Radio-opaque dye injected into the superior vena cava, however, is seen to flow into the donor right atrium. Biopsies have been obtained without difficulty from the donor left ventricle via an arterial approach.

Recent cardiac catheterization shows good donor left ventricular function, with a cardiac output of 4.1 l/min. (Table). Although the recipient left ventricular pressures are normal, ventriculography shows severe global hypokinesia.

## DISCUSSION

The indications for HHT in the two patients outlined above were, respectively, (1) intractable angina in the presence of a well-functioning left ventricle, and (2) cardiac failure from a myocarditis with the potential for recovery. Both patients have clearly done well. Continuing angina has not been a problem in the first patient. Unfortunately, no significant recovery of the recipient heart has occurred in the second patient.

The largest experience of HHT has been accumulated in Cape Town, where, between 1974 and 1984, forty-nine consecutive heterotopic transplants were performed.<sup>5</sup> There were no operative deaths, and the one-year survival (in this pre-cyclosporine era) was 55%. To date, three patients have lived for more than ten years; one of these underwent HHT for intractable angina.

Several cases in the Cape Town series are worthy of comment. One patient showed significant recovery of a myocarditis within three months, at which time he was suffering from mixed acute and chronic rejection of the donor heart; the donor heart was excised. The patient led a completely unrestricted life for over four years, at which time he died suddenly, apparently from a rhythm disturbance in a mildly cardiomyopathic heart.

Three patients, whose donor hearts were stored on a hypothermic perfusion machine for periods ranging from 7 to 13 hours (the longest storage times recorded to date), demonstrated diminished ventricular function for several hours after HHT, after which time full recovery occurred, and the donor heart assumed full responsibility for the circulation.<sup>6</sup>



Figure 3. Postero-anterior chest radiograph of Patient II after heterotopic heart transplantation; donor heart lies in the right chest. Radio-opaque metal ring to right of midline marks site of anastomosis of two right atria, and acts as guide to cardiologist during endomyocardial biopsy of donor right ventricle.

Several patients lost recipient heart function entirely in the months or years following transplantation, yet the hearts had proved invaluable in helping them through severe rejection episodes when donor heart function was temporarily impaired, often severely so. In three patients, no donor heart function whatsoever could be demonstrated for periods of time from one to four days during such crises, yet full recovery eventually occurred.<sup>3,4</sup>


The hope that cardiomyopathic hearts would recover during the period of support given by the graft has, unfortunately, not been fulfilled. In all patients with this disease, there was a steady progression of the myopathy until recipient heart function ceased entirely or almost so. The presence of a nonfunctioning recipient heart has not been associated with any morbidity in any patient, as long as anticoagulation therapy with coumadin was continued.

Several patients in the Cape Town series have done spectacularly well. One 21-year-old man, transplanted at 14 years of age for cardiomyopathy, and re-transplanted for chronic rejection at 18 years, is now working as a tourist guide in Southern African game reserves; his major pastimes are parachuting and skydiving!

Since 1984, the Cape Town group has continued to perform HHT when indicated. During 1986, 14 patients received orthotopic transplants, 7 received transplants of the heart and both lungs, and 3 received heterotopic transplants. The indications for HHT were significant discrepancy between recipient and donor size in two, and suspected diminished viability of the donor heart in one; all three patients remain alive and well.

Heterotopic transplantation should, we believe, be preferred to orthotopic transplantation whenever there is an indication.

### ADDENDUM

Two further heterotopic heart transplants have been performed successfully during 1988; both patients remain well. 

*Acknowledgments:* We wish to thank the many members of the medical, nursing, and paramedical staff of Baptist Medical Center, Oklahoma City, and Texoma Medical Center, Denison, Texas, who have contributed to the care of the two patients reported in this paper.

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## News from the Oklahoma State Department of Health

### Laboratory Diagnosis of Rabies

Over 100 cases of animal rabies have been documented annually in Oklahoma during the last five years. Domestic animals account for 5% to 10% of all reported animal rabies, with the majority of domestic animal cases involving dogs, cats, and cattle. Although many wild animals may acquire the disease, the species most often infected are skunks, raccoons, and bats. Small rodents, birds, and reptiles are not known to serve as reservoirs of rabies in nature.

Rapid and accurate laboratory diagnosis of rabies is crucial for proper medical management of exposed individuals and instigation of adequate control measures within the community. Laboratory diagnosis of animal rabies consists of examination of the brain for the presence of virus or inoculation of suspected rabies-infected brain tissue into laboratory

mice. The direct fluorescent antibody test (DFA) is currently the most widely used diagnostic procedure. In the DFA, rabies antisera labeled with a fluorescent dye is reacted against tissue from three areas of the brain: the medulla, cerebellum, and hippocampus. The presence of virus in the tissue is detected by the fluorescing antigen-antibody complex. The DFA test is both highly sensitive and specific and has replaced the histological examination of the brain for Negri bodies, the characteristic intracytoplasmic inclusions produced by the rabies virus. Since no reliable diagnostic procedures are available to confirm human infection, prompt treatment of exposed individuals is necessary.

Animals exhibiting symptoms of rabies should be euthanized and the animal's head sent to the laboratory for examination. The head should be packed in cold packs and placed in a watertight container for transport to the laboratory. Transit time should be less than two days to reduce decomposition of the brain. Poisons or damage to the head will interfere with laboratory testing procedures.

For additional information, please contact the Microbiology Laboratory, Division of Laboratory Services, Oklahoma State Department of Health, (405) 271-5070.



DISEASE	May 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	4	5
CAMPYLOBACTER INFECTIONS	12	47	76	73
ENCEPHALITIS, INFECTIOUS	0	4	7	10
GIARDIA INFECTIONS	11	51	66	71
GONORRHEA (Use ODH Form 228)	553	2908	4179	4835
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	11	86	90	86
HEPATITIS A	17	216	138	174
HEPATITIS B	3	67	113	90
HEPATITIS, NON-A NON-B	2	18	16	21
HEPATITIS UNSPECIFIED	3	16	14	41
MEASLES (RUBEOLA)	0	8	1	4
MENINGITIS, ASEPTIC	4	15	29	30
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	6	7	21	30
MENINGOCOCCAL INFECTIONS	7	8	17	17
PERTUSSIS	0	24	31	72
RABIES (Animal)	4	18	12	30
ROCKY MOUNTAIN SPOTTED FEVER	14	15	19	31
RUBELLA	0	1	0	0
SALMONELLA INFECTIONS	6	78	123	137
SHIGELLA INFECTIONS	8	45	82	70
SYPHILIS (Use ODH Form 228)	23	75	74	78
TETANUS	0	0	1	0
TUBERCULOSIS	19	85	102	106
TULAREMIA	4	6	5	5
TYPHOID FEVER	0	0	2	1

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	53
BRUCELLOSIS	2
LEGIONNAIRES DISEASE	4
MALARIA	6
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	4

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# **HIV Reporting in Oklahoma:**

## **Guidelines for Physicians and**

### **Answers to Common Questions**

Joan K. Leavitt, MD; John Harkess, MD; Gregory R. Istre, MD

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*This article was written to clarify the process for physician reporting of Human Immunodeficiency Virus (HIV) infections in Oklahoma. HIV infections have been an officially reportable condition in our state since June 1, 1988.*

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#### **Background**

The Oklahoma State Board of Health is empowered through statutes (O.S. 63-1-503) to determine which diseases and conditions are officially reportable in Oklahoma. In July 1983, acquired immunodeficiency syndrome (AIDS) was made reportable in Oklahoma. At its January 1988 meeting, the board unanimously agreed to add HIV infection to the list of reportable conditions. The Department of Health took steps to implement a reporting system which began on June 1, 1988, adding our state to a growing list of states (now numbering about one dozen) which have official reporting of HIV infections.

#### **Why?**

Surveillance of infectious disease forms the basis of disease control and prevention. The clinical physician uses the information obtained from the history,

physical, and laboratory examinations in order to make a diagnosis which guides treatment on an individual patient. So the public health physician uses information obtained from surveillance and investigation of infectious (and some noninfectious) diseases to develop appropriate prevention and intervention strategies. Information from ongoing surveillance is used to identify the magnitude of the problem, the groups at risk, the modes of transmission, and to allow the application of specific preventive measures. There is no infectious disease which we attempt to control without using appropriate surveillance.

Every good system of disease surveillance involves a cooperative relationship between practicing physicians and the health department. Making a disease reportable fosters the flow of information by removing the physician from potential liability for such reporting.

There are several specific reasons that HIV infection, as opposed to "full-blown" AIDS, is reportable in Oklahoma:

- 1. To ensure complete educational counseling for the HIV-infected person.** The only preventive measure we have to offer is education to change behavior. It is critical that every individual who is HIV-infected be counseled about what the infection

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From the Oklahoma State Department of Health, P.O. Box 53551, Oklahoma City, OK 73152.



## OKLAHOMA STATE DEPARTMENT OF HEALTH – PHYSICIAN HIV POSITIVE ANTIBODY REPORT

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means, how HIV is spread, and how to prevent spreading it to others. The State Health Department will offer assistance for further counseling of HIV-infected persons, if needed.

**2. To offer assistance with notifying the sexual and needle-sharing partners of the HIV-infected person.** Among the groups at highest risk of HIV infection are the sexual partners and needle-sharing partners of an HIV-infected person. Some studies have indicated that many of these high-risk persons may not consider themselves at risk, and often have not been tested for HIV infection prior to finding out that a sexual partner was infected.

Partner notification is, and always has been, voluntary. Public health personnel cannot force someone to identify his or her sexual partners. Partner notification and contact tracing have been successful only because public health personnel can assure confidentiality and can convince patients of the importance of such activities. Most partner notification for HIV infection will involve the infected person notifying his/her sexual partner and advising them to seek counseling and testing. The health department will offer assistance with this duty. Since there are not enough resources to do partner notification or contact tracing for every HIV-infected person, the health department's top priority will be those instances which may involve women of childbearing age, who likely do not consider themselves at risk, and who, if infected, could spread infection to an unborn or newborn infant.

**3. To monitor trends in HIV infection.** For the past several years, we have monitored cases of AIDS. This has given us information about how HIV was being transmitted four to six years (or more) in the past. By monitoring HIV infection, we can move that timetable forward, perhaps by several years. Information obtained from persons with HIV infection can tell us in a contemporary manner whether there are changes in proportions of people infected by various means. This information may also allow us to make better predictions about the number of persons with AIDS in future years, and allow us to plan more precisely to be able to provide care for them.

## Who should be reported?

Officially, physicians should report any person whom the physician treats or diagnoses with HIV infection. With current diagnostic tests, this will ordinarily mean any person with a positive test for HIV antibody or antigen, or a positive viral culture for HIV. Persons whose screening Elisa test is positive but whose confirmatory test (usually Western Blot) is negative, are not considered infected and should not be reported. The health department expects physicians to report any person they treat or diagnose with HIV infection, whether that physician ordered the test or the test was done elsewhere. If there is any doubt about whether the patient has been reported to the health department, the physician should report. Duplicate reports on the same patient can be identified and extracted once they arrive at the health department.

## How should the physician report a case of HIV infection?

A special form for HIV infection reports (Fig) was sent to all physicians, laboratories, and infection control practitioners in early June 1988. This report contains instructions as well as one copy for the physician's record and one for the health department. The copy which is given to the health department has no explanation for the boxes, in order to make the information unrecognizable to the untrained observer. The copy for the physician record may be kept, with rigid safeguards to protect the information from unwarranted disclosure, or it may be destroyed, with the same safeguards in place.

## How is confidentiality protected?

Reports of HIV infections or AIDS are handled with the strictest confidentiality. The reports are seen by one individual, or at the most, two. They are kept in a locked file with an additional bar lock, in a locked office with an alarm system which calls the police in case of unauthorized entry or movement. HIV infection which is stored in a computer does not link names with reports — only coded numbers are present with the other information. In addition, the computer is not linked to any other computer and is not connected to a phone line, making it impossible for "hackers" to tamper with the data.

Names and personal identification of patients are never given out. If contact tracing is done, it is done without identifying individuals. The health department has a long history of protecting the confidentiality of records, and of doing contact tracing while maintaining confidentiality in dealing with syphilis and gonorrhea.

A recent analysis of reported breaches of confidentiality among persons with AIDS showed that they occurred in hospitals and clinics, or from the patients themselves, but not from the health department. Disease reporting does not significantly increase the risk of confidentiality breaches.

## How is follow-up done?

In virtually every instance, personnel from the health department will contact the patient's physician before attempting to locate the reported patient. If the physician is sure that the patient has received

adequate counseling and does not need assistance with partner notification, it is unlikely, given current resource limitations, that the patient will receive further contact at this time. Patients who are identified by the physician as being in a high-priority category or as having a need for follow-up will receive further follow-up.

## Will reporting discourage high-risk persons from being tested?

Physicians and public health personnel have the responsibility to educate their patients about how to stay healthy. Part of the educational message, as it regards AIDS and HIV, involves dispelling unwarranted fears. People who understand the process of reporting and the importance of HIV surveillance will understand that the information is confidential, that partner follow-up and counseling is voluntary, and that the process is an important step in the control of the HIV epidemic.

Nevertheless, for persons who would not otherwise be tested and counseled, the health department will continue to offer the option of anonymous testing and counseling at six sites in the state, where partner notification services can be offered on location.

## Summary

Reporting of HIV infections is an important step in the control of the HIV epidemic. All reports are kept strictly confidential. The major reasons for making HIV reportable are to offer complete counseling to HIV-infected persons, to offer partner notification assistance, and to monitor trends in the epidemic. Education about the process of reporting the safeguards to protect confidentiality, and the nature of voluntary partner notification will help to eliminate unwarranted fears associated with this important step in the control of the HIV epidemic.



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Kenyon K. Kugler, M.D.  
Richard Tenney, M.D.

## Ophthalmology

David L. Edwards, M.D.  
Joseph F. Fleming, M.D.  
Gerard J. Hunter, M.D.  
Kenneth A. McCoy, M.D.  
David L. Schwartz, M.D.  
Mark J. Weiss, M.D.

## Orthopedics

James L. Gniffin, M.D.  
John F. Josephson, M.D.  
Tom A. Marberry, M.D.  
Arthur J. Murphy, Jr., M.D.  
Terrill Simmons, M.D.  
Jerry Sisler, M.D.  
John Vosburgh, M.D.

## Otolaryngology

John G. Campbell, M.D.  
David O. Menfield, M.D.  
John D. Mowry, M.D.

## Plastic Surgery

E. Bradley Garber, M.D.  
Fred R. Martin, M.D.  
Arch Miller, M.D.

## Thoracic/ Cardiovascular

Robert C. Blankenship, M.D.  
George S. Cohlma, M.D.  
Frank N. Fore, M.D.  
Billy P. Loughridge, M.D.  
**Urology**  
Harold W. Calhoun, M.D.  
John B. Forrest, M.D.  
Roger V. Haglund, M.D.  
David L. Harper, M.D.  
James R. Leach, M.D.  
J. Steve Miller, M.D.  
Victor L. Robards, M.D.

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*Appointment effective July 1*

## Board of Trustees names Ed Kelsay as General Counsel

Oklahoma City attorney El Kelsay, staff legal counsel for the Oklahoma State Medical Association since 1980, became OSMA General Counsel on July 1, 1988.

## AMA trustee to visit state, discuss relative value scale

American Medical Association Trustee Lonnie R. Bristow, MD, will be in Oklahoma City next month to discuss Harvard University's Resource Based Relative Value Scale Study and its implications for physicians.



Lonnie R. Bristow, MD

Dr Bristow, a California internist, will address a dinner meeting of the Oklahoma County Medical Society (OCMS) on Tuesday, September 20. OCMS invites any Oklahoma physician

interested in the relative value scale to attend.

The meeting will be at the Central Oklahoma Homebuilders Association, 625 Northwest Expressway, next door to the offices of the Oklahoma State Medical Association; a reception begins at 6:00 PM and dinner is at 6:30 PM.

Reservations may be made by calling OCMS, 405-843-5619. The cost for dinner is \$10; there is no charge for OCMS members.

Appointed to the position this spring by the OSMA Board of Trustees, Kelsay will represent the association in legal proceedings. In addition, he will continue to spend part of his time at the OSMA, available to members seeking counsel in the business, legal, or ethical aspects of their medical practices.



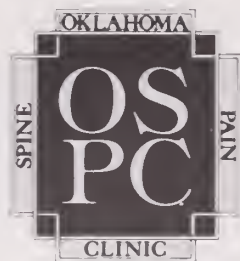
Ed Kelsay

July 1 also marked the beginning of Kelsay's new private practice in civil law, where he will concentrate on association, administrative, and business law; professional corporations; employment law; negotiations; and law affecting the practice of medicine and dentistry.

A graduate of the Oklahoma City University School of Law, Kelsay joined the OSMA in 1966. From 1975 to 1979 he served as executive director of the Oklahoma Foundation for Peer Review (OFPR), rejoining the OSMA in 1980 as staff legal counsel.

Kelsay is a Certified Association Executive, a Fellow of the American Society of Association Executives, and a member of the Board of Directors of the National Speakers Association. He is also an adjunct instructor of medical law and practice management for the Department of Family Practice at the University of Oklahoma College of Medicine.

Kelsay's new law office is in the Executive Terrace Building, Suite 212, 2809 Northwest Expressway, Oklahoma City, OK 73112.



## Oklahoma Spine/Pain Clinic

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DIRECTOR

Diplomate American Board Orthopaedic Surgery

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Oklahoma City, Oklahoma  
(405) 752-0010



**William M. Haynes, MD**, (right) Henryetta, receives a special plaque in recognition of his fifty years of medical practice. Presenting the award during the community's June 18 "Dr Haynes Day" celebration is John R. Alexander, MD, president-elect of the Oklahoma State Medical Association.

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- ☐ Lung volumes
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- ☐ Diagnostic skin testing

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## DEATHS

**Vernon Dale Cushing, MD**  
1914 - 1988

Oklahoma City allergist Vernon D. Cushing, MD, died June 19, 1988. An OSMA Life Member, Dr Cushing was born in Downs, Kan, and earned his medical degree at the University of Kansas School of Medicine in 1939. He moved to Oklahoma City in 1946 to complete residency training in internal medicine at University Hospital.

**Dean Crittenden Walker, MD**  
1919 - 1988

OSMA Life Member Dean C. Walker, MD, a native of Pawhuska, died June 11, 1988. An internist, he was graduated from the Columbia University College of Physicians and Surgeons in 1944 and served in the US Army from 1945 to 1947. In 1950 Dr Walker joined Tulsa's Springer Clinic, where he practiced medicine until his retirement in 1985.



### ACP executive disputes editorial about laboratory test guides

*To the Editor:* Dr Myers's editorial (*J Okla State Med Assoc*; Vol 81, May 1988) regarding guidelines on 15 commonly used laboratory tests deserves comment. While acknowledging that many tests are over or inappropriately used, Dr Myers objects to the attempts of the American College of Physicians in collaboration with the Blue Cross and Blue Shield Association to provide scientific data supporting the necessary and appropriate uses of the tests. He does not find fault with the content of the guidelines nor the published review articles on which they are based but rather that they exist at all, and that they were developed in a "centralized decision-making system." Of course, all acceptable standards for medical practice — for example, regulations for

pathology laboratories or therapeutic regimens found to be efficacious in controlled clinical trials — are derived through similar systems.

Using his analogy of the American Revolution that resulted in the remarkable US Constitution, the American College of Physicians deliberately developed "guidelines." Not codified laws. Like our Constitution that can be amended, so can these unrestrictive guides to the rational use of laboratory tests.

—Linda Johnson White  
Director

Department of Scientific Policy  
American College of Physicians

### Year of Medicare participation educates physician and patients

*To the Editor:* I am writing this letter to you to express my feelings, opinions, and thoughts on the current practice of medicine in Oklahoma City.

I am a family physician who has been in private practice in the northwest Oklahoma City area for approximately 7½ years. I am residency trained and board certified and was re-certified by board examination in July, 1987, by the American Board of Family Practice.

I served in the US Navy as a general medical officer for two years between my first and second years of residency in 1976 through 1978 and was honored to be aboard the USS *San Diego* in 1976 and 1977. This was my first taste of pre-paid, government-sponsored medical care. It left long-lasting impressions on a very young, newly trained physician. My deepest personal opinion, although I was quite successful and received the highest marks on my officer fitness reports, was one of second or worse rate quality of service and care and the awesome responsibilities of gatekeeper medical systems and health (non) maintenance organization medicine.

I am now 38 years old, more scarred now, more experienced, still enthusiastic, and basically a very happy person.

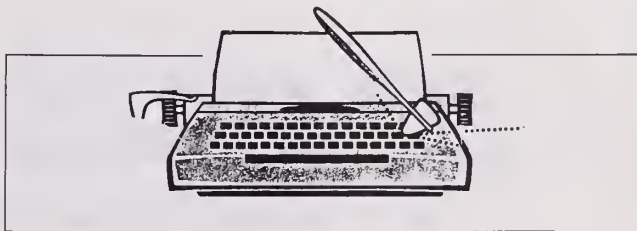
My happiness is rooted to many things, both personal and professional.

I am afraid of losing that professional satisfaction, however. The two most threatening things to my professional satisfaction are: (1) HMO/PPO

medical systems, particularly ones that compromise quality to any degree for profit; (2) Medicare rules and regulations that force participation.

I believe that forced participation disenfranchises patients and their doctors from quality and availability of services. The current system does not adequately cover the costs of said services. Yes, I said cost. Forget profits! Profits are certainly not part of the system in primary care, at least in 1988.

My reference points are my previously mentioned experience, my reading of the gatekeeper HMO



newsletter that exclaimed highest quality of care on one side and how to limit patient visits, ie, cost to gatekeeper on the reverse side, and my 1987 year of participation with Medicare.

My patients and I were not satisfied in 1987 with this year of participation. Financial strain due to poor reimbursement schedules of thousands of dollars created financial stress on myself and my office. Patient disbelief at the bottom line reimbursement





# 1988

## THIS IS

# ELECTION YEAR!!

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- \* Even numbered districts of the State Senate are up for election

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## WORTH REPEATING

### The Portable Curmudgeon

by Bruce O. Boston

Among my favorite figures in the editorial pantheon is the cigar-chomping, hard-bitten, bourbon-belting, crusty, irascible, iconoclastic city-room tyrant. This is the misanthrope whose view of human nature is so cynical that he would sooner submit to an evening at the opera than so much as lift an eyebrow when his neighbor, a loving husband and Episcopal rector, becomes an ax murderer one morning, dismembering his devoted wife of 30 years for coddling the eggs too long. His only question would be, "What took him so long?" This is Lou Grant as an H. L. Mencken knock-off — the world-class curmudgeon.

What curmudgeons have long lacked is a manual — a handbook to tuck in the pockets of their hair shirts for ready reference in time of pique. No more. Browsing the bookstores the other day I came across *The Portable Curmudgeon*, compiled and edited by Jon Winokur (New York: New American Library, 1987). This book is all the ammunition the aspiring churl will ever need for gunning down the latest hypocrisy or pretense. The book is 300 pages of alphabetically arranged pet peeves, from Abstract Art ("A product of the untalented sold by the unprincipled to the utterly bewildered" — Al Capp) to Youth ("The denunciation of young people is a necessary

part of the hygiene of older people and greatly assists in the circulation of the blood" — Logan Pearsall Smith).

The quotes are great, but the book's real treasures are the brief anecdotal collections from some of the world's great curmudgeons:

- Mencken (of course), who once described his life's work as "stirring up the animals" and his editorial philosophy at *The Smart Set* as "nothing up-lifting";
- W.C. Fields, who, when a friend caught him reading the Bible in a hospital bed during his last illness, explained that he was "just looking for loopholes";
- George S. Kaufman, who once asked a monopolistic conversation partner at dinner, "Madam, don't you have any unexpressed thoughts?" and
- The truly razor-tongued Dorothy Parker, who, when told that Clare Boothe Luce was always kind to her inferiors, replied, "Where does she find them?"

In reading *The Portable Curmudgeon*, I realized that I don't know very many editors, if any, who have what you would call a sweet disposition. I called a few of them to check this out and was mostly rewarded with either "Are you crazy? In this business?" or

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(continued)

### Reaction Time (continued)

(that I agreed to accept) led to direct and meaningful discussion and two-way education in my office. I consider this year of experience as experimental and a never-to-be-forgotten educational experience that was worth at least a fraction of the thousands of dollars that were lost. For this, as well as my Navy medical experience, I am deeply grateful to my government.

In conclusion, my plea to my colleagues is to please consider all alternatives before signing with XYZ insurance company as their hired hand/gatekeeper. Please talk to colleagues who participate with Medicare and find out what the system believes your true value is.

My plea to organized medicine is to organize, educate, and conduct open forums with patients,

employers, and insurance industry officials, including our Uncle Sam.

My fears are primarily ones of quality of care, life, and happiness for my patients and for my profession. Certainly, the almighty dollar is a reality, but not worth compromising quality existence of life. I thank you for listening.

—Michael L. Winzenread, MD  
Oklahoma City

P.S. Dr Winzenread is currently vice-president of the Oklahoma Academy of Family Physicians, Chairman of Family Medicine Department at Mercy Health Center in northwest Oklahoma City, former editor of the Oklahoma Academy of Family Physicians Newsletter, 1986-88. He states that he is still in the trenches, basically happy, but deeply concerned as reflects his view point above.





## BOOK SHOP

**John Steinbeck's Fiction: The Aesthetics of the Road Taken.** By John H. Timmerman. Norman and London: University of Oklahoma Press, 1986, pp 314, price not given.

John Steinbeck, winner of the Nobel Prize for Literature in 1962, ranks among the most distinguished of American writers of fiction. In this volume of literary analysis, Professor Timmerman correlates the biographical elements of Steinbeck's life with comprehensive criticism of the numerous productions of Steinbeck's pen. The major philosophical and literary themes of Steinbeck's world view are shown in their development and flowering, culminating in *The Grapes of Wrath*, the *Cannery Row* novels, and *East of Eden*.

One of Steinbeck's literary themes is that of "nonteleological existence," the participation in life without delayed goals, which Steinbeck believes to be natural and healthy. A second theme is that of the change of individual human behavior when operating in a crowd, the "group man," which subverts individuality. The final theme is that of the interrelationship of the natural existence of man with a higher sense of power (although not a tradi-

tional God), which Steinbeck evokes by symbolism and allusion. Professor Timmerman denotes this as "supernatural naturalism."


*The Grapes of Wrath*, Steinbeck's most famous novel, grew out of an assignment to write a series of articles for the *San Francisco News* on the plight of migrant agricultural workers in the San Joaquin Valley. The book stirred protests and censorship, both for its political implications and for its language, and led to the author's being branded a Marxist, and later an apostate Marxist, neither of which was true. Steinbeck was never a dogmatist. He wrote of the people he knew or came to know, their struggles, successes, failures, joys, and sorrows.

— Samuel R. Oleinick, MD, PhD  
Oklahoma City

## Worth Repeating (continued)

"Don't you have anything better to do than bother me? Get a job!"

That pretty much covers it. Editors are drawn to the curmudgeonly way of life, I think, because it suits not their personalities but the profession. And like teetotaling, curmudgeoning can't be done in secret. Editors get that way because they are mostly paid skeptics. They are in the business of assuming that there is something wrong with what they're looking at, and it is their job to find it. They see too much pomposity, hypocrisy, and double-dealing to remain trusting — or sweet-tempered — for long. Their only real masters, the clock and calendar, are absolutely heartless, and the editors respond in kind.

Becoming a curmudgeon is simply a way of coping, a way of making the editorial bed of thorns a little easier to lie on. And, as Jon Winokur's collection seems to be telling us, if you can do it in a way that makes other people smile — or wince — with you, then maybe you've somehow kept your humanity intact. 

—©1988, Bruce O. Boston. The author is president of Wordsmith, Inc., and a contributing editor to *The Editorial Eye*.

## IN MEMORIAM

### 1987

Dan Cross Galloway, MD	July 12
Donald Owen Walker, MD	July 21
Cecil Reid Reinstein, MD	August 14
Alwin Marshal Clarkson, MD	September 1
Rex Elmer Kenyon, MD	September 16
Charles P. Bondurant, Jr., MD	October 12
James C. Smith, Jr., MD	December 30

### 1988

Charles Stewart Cunningham, MD	January 1
Charles Wallace Coyner, MD	January 4
Glen Franklin Wade, MD	January 12
Newman Sanford Matthews, MD	January 12
Frank Cornwell Lattimore, MD	January 30
Leo Lowbeer, MD	February 3
Joseph Norman Kramer, MD	February 16
Eugene Richard Flock, MD	February 17
Jay P. Irby, MD	February 25
James William Finch, MD	March 4
John Junior Donnell, MD	March 7
Tony Willard Pratt, MD	April 21
James Park Dewar, Jr., MD	May 5
Hugh Albert Stout, MD	May 7
James Robert Carroll, MD	May 28
Dean Crittenden Walker, MD	June 11
Vernon Dean Cushing, MD	June 19



## MISCELLANEOUS ADVERTISEMENTS

Miscellaneous advertising is available at the rate of \$11 per month per vertical inch or any portion thereof (ie, 1-7 lines is \$11, 8-14 lines is \$22, etc). Rates are not prorated for fractions of an inch. One inch of space contains 7 lines of copy averaging 55 characters each. The first line of the ad will automatically be set in all capital letters and averages only 38 characters. Count every letter, space, and punctuation mark as a character.

Box numbers will be assigned upon request at no additional charge. When requesting a box number, the last line of the ad must read: Reply JOURNAL BOX 00, c/o OSMA. This will add 32 characters and must be included.

Typewritten copy is preferred. Otherwise, print very legibly in ink. Ads will not be accepted on the telephone. Be sure to indicate how many times the ad is to run, and for the JOURNAL's records, please include a name, address, and telephone number where you can be reached if necessary. Ads must be received by the first of the month preceding the month of publication.

Enclose payment with your ad and mail to: OSMA JOURNAL, 601 Northwest Expressway, Oklahoma City, OK 73118. OSMA members and state agencies will be invoiced upon request.

**IMPORTANT NOTICE:** Effective September 1, 1988, the rate structure for all miscellaneous advertisements will be as follows: \$25 per insertion up to 50 words, .50 each additional word.

**BEST OFFER BUYS 3500 SQUARE FOOT, BRICK HOME,** 4 Bedrooms, 3 Baths, Formal Living, Formal Dining, Family Room, 40 x 50 Horse Barn, Pipe Runs, 40 Acres, 2 Ponds, Pecan trees, City water, Paved road. 1 1/4 Mi. from Wetumka, Okla. off Hwy #9 East. 405-382-7500, 405-382-6905.

**FAMILY PRACTITIONER NEEDED — PROGRESSIVE** southwest Missouri community is seeking BC/BE Family Practice physician to move into an established, busy practice to provide a full range of services (OB optional). This lucrative opportunity provides call coverage, income guarantee and benefit package. An outstanding local 50-bed hospital is the hub of an active medical environment with frequent visiting specialists and excellent referral options. For detailed information call (913) 345-2822 or outside Kansas toll free 1-800-638-6942.

**ESTABLISHED SOLO PEDIATRIC PRACTICE IN PRIME** location of OKC metro area close to the best hospitals in town. Grossing over \$160,000. Fully equipped. Will stay to introduce. Call 405-523-1540 to discuss possibilities of acquiring this rewarding practice.

**MEDICAL AND OFFICE EQUIPMENT FOR SALE.** THE entire inventory of a solo family physician's office is for sale including instruments, medical and office furniture, some basic laboratory equipment, and all the other minutiae needed to start up a practice. Almost all items were purchased new during or after late 1983 and are of better than average quality and taste. Also available is a recently purchased Compaq 386 computer, a 24-pin Toshiba printer, and numerous accessories. For a complete listing with prices paid at time of purchase, please send requests to Equipment, P.O. Box 516, Tahlequah, OK 74465. These items are being sold by an individual physician and significant savings could be arranged for someone wishing to purchase the entire inventory.

**SOUTHEAST OK URGENT CARE CENTER LOOKING** for physician to take over business or become partner. No hospital work, no nights, no weekends. Excellent lifestyle and potential. Attractive for female physician raising a family, young entrepreneur or older MD wanting reduced practice pressures and liability risks. Reply Journal Box 29, c/o OSMA.

**ATTENTION PULMONARY PHYSICIANS: FOR SALE:** ABL 30 blood gas machine with conditioner and extra electrodes. State of the art Gould System pulmonary function machine. Electric tilt table for postural drainage. All in excellent condition. R.W. Nicholson, M.D. 918/478-2020.

**VACANCY EXISTS FOR CLINICAL DIRECTOR OF THE** proposed VA outpatient clinic located in Lawton, OK. Candidates should be board certified doctors of internal medicine or family practice. Responsibilities of the clinical director include provision of the overall medical direction for the outpatient clinic, with responsibilities for both the personnel and operational budget. The outpatient clinic is projected to have between 21,000 and 25,000 outpatient visits annually. The successful candidate will receive a faculty appointment at the University of Oklahoma College of Medicine commensurate with their credentials and experience. Continuing education will be available for the clinical director. Starting salary will range from \$54,907 to \$71,377 per year plus bonus. Lawton, OK, is a community of approximately 100,000 people. It is located in the southwest part of Oklahoma, adjacent to Wichita Wildlife Refuge. It is a community known for its good schools, including a college. It is described as being economically sound and has friendly neighborhoods. Additional information pertaining to the clinical directorship for this outpatient clinic can be obtained by contacting Charles E. Smith, M.D., Chief of Staff, (405) 272-9876, Ext. 3306, or Toan Q. Tran, M.D., Assoc. Chief of Staff, Ambulatory Care, (405) 272-9876, Ext. 5415, VA MEDICAL CENTER, 921 N.E. 13th Street, Oklahoma City, OK 73104. Equal Opportunity Employer.

**PSYCHIATRIST — UNIVERSITY OF OKLAHOMA,** Charles B. Goddard Health Center. Full-time position caring for 20,000 students, faculty and staff. Responsible for outpatient care, referral and medication. Will work closely with staff physicians and two clinical psychologists. On-call responsibility handled by phone at home. Contact Carl S. Whittle, Administrator, or Drury R. Thorn, M.D., Chief of Medical Staff. (405) 325-4611.

(continued)



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## INSTRUCTIONS FOR AUTHORS

### Contributions

Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

**IMMEDIATE OPENINGS FOR ONE FAMILY PHYSICIAN and one internist in Altus.** Southwest Oklahoma's major center. Board qualifications not necessary. Small group. Excellent salary, benefits and bonus with later partnership offer. No investment required. Contact Ramesh Chandra, PhD, APS, PO Box 151, Hollis, OK 73550 or call collect 405-688-3387.

**ORTHOPAEDIC SURGEON, UROLOGIST, ENT NEEDED** immediately for solo practice in Stuttgart, Arkansas, the Rice and Duck Hunting capital of the world. Modern hospital facilities and equipment. Family oriented community. Excellent schools. Call Jim Bushmaier at (501) 673-3511.

**ANESTHESIOLOGIST — IMMEDIATE NEED IN TEXAS** community of 25,000 (trade area 75,000) for BE/BC MDA to assume service for 100-bed, modern hospital. 33 physicians on staff, with 12 surgical specialists. Contract with hospital to provide complete anesthesia services. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**DIAGNOSTIC RADIOLOGIST — SMALL RADIOLOGY** group has immediate need for recently trained, BC associate. Group is sole provider for regional medical center serving approximately 150,000 in NE Texas and SE Oklahoma. All modalities, including MRI and interventional radiology. Family-oriented community of 27,000; strong, diversified economy; good schools. Excellent incentive package; early partnership. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**FAMILY PRACTICE — BC FPs SEEK ASSOCIATE** FOR busy practice, including OB, in West Texas town of 8,500 (drawing area 15,000). Modern, 50-bed hospital. Specialists available for referrals. Generous incentive package and terms of association. Many social and recreational activities; great schools; easy access to metropolitan area and major airport. Contact: Physician Resource Network, P.O. Box 37102, Ft. Worth, TX 76117; 817/595-1128.

**FAMILY PRACTICE — SMALL TEXAS PANHANDLE** town located on Interstate Highway seeks one or two FPs to assume practice of retiring physician. No purchase necessary. Service area population 10,000. OB needed. Office adjacent to 45-bed hospital. Call coverage and time off no problem. Generous incentive package. Physician Resource Network, P.O. Box 37102, Fort Worth, TX 76117, 817/595-1128.

**FAMILY PRACTICE — SMALL GROUP HAS IMMEDIATE** need for BC FP. Nice community of 25,000; modern hospital; many specialties represented. Many recreational/social amenities; easy access to major airport. Incentive package and favorable terms of association. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, TX 76117; 817/595-1128.

**INTERNAL MEDICINE — IMMEDIATE NEED FOR BE/BC** general internist for solo practice with shared call. Office on campus of regional medical center serving 150,000 in Northeast Texas and Southeast Oklahoma. Family-oriented community of 27,000 with strong, diversified economy; good schools. Competitive incentive package. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.



**NEUROLOGIST — MEDICAL STAFF OF BUSY NE** Texas regional medical center serving 150,000 seeks BE/BC neurologist. Share call with recently trained BC neurologist. Office on campus with modern, well-equipped, 200-bed hospital. Most specialties, sub-specialties represented in community. No HMOs. Enjoy excellent lifestyle in nice community of 27,000 with strong, diversified economy, good schools. Junior college in town, university nearby. Many social and recreational opportunities. Access to D/FW Metroplex, international airport. Competitive incentive package. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**NON-INVASIVE CARDIOLOGIST — IMMEDIATE NEED** for BE/BC physician in SE Oklahoma community of 13,500+ (trade area approximately 40,000). New, 100-bed, JCAHO accredited hospital. Located one and one-half hour from Dallas/Fort Worth metroplex. Generous incentive package to qualified physician. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**OBSTETRICIAN/GYNECOLOGIST — IMMEDIATE** need for OB/GYN to assume established practice in affluent, scenic central Texas community. Easy access to Austin, San Antonio. Modern hospital, epidural anesthesia. Share call with other OB/GYNs. Incentive package to qualified physician. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

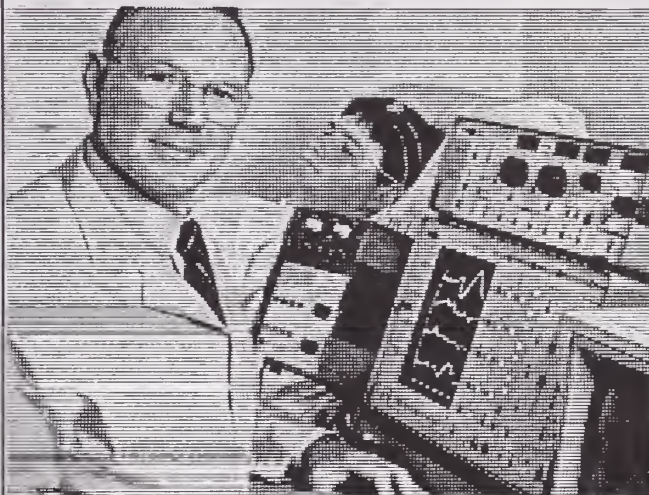
**ORTHOPEDIC SURGEON — BUSY GROUP OF 5** orthopedic surgeons seeks recently trained, BE/BC general ORS. Two modern, 200-bed hospitals. Nice town of 27,000 (trade area of 150,000); strong, diversified economy; good schools; many social and recreational opportunities. Rotating call and favorable terms of association. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, Texas 76117; 817/595-1128.

**ORTHOPAEDIC SURGEON — NEEDED FOR ATTRAC-** tive Texas community of 25,000 (trade area 75,000). Associate practice or solo with shared call. Modern, 126-bed hospital with excellent equipment. Many specialists on staff. Competitive incentive package. Contact: Physician Resource Network, P.O. Box 37102, Fort Worth, TX 76117; 817/595-1128.

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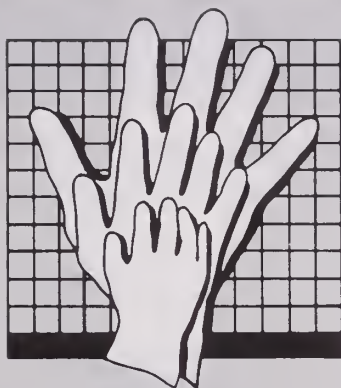
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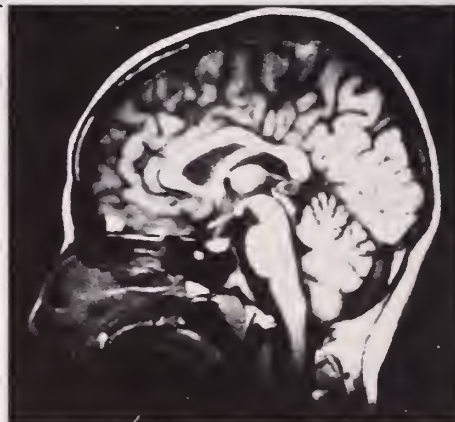
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## THE LAST WORD

■ It's election year, and campaigns across the country are shifting into high gear. At the same time, the Oklahoma Medical Political Action Committee (OMPAC) is stepping up its efforts to boost both membership and physician participation. OMPAC Chairman Larry L. Long, MD, is encouraging Oklahoma physicians to share their information and opinions about candidates and races with members of the OMPAC Board of Directors or OMPAC Director Robert W. Baker III. Call 843-9571 or 1-800-522-9452.

■ **The Retired Doctor's Club, founded in Oklahoma City** five years ago by Hervey A. Foerster, MD, was the subject of a story appearing in the June 17 issue of *American Medical News*. The club members meet for lunch every month at Baptist Medical Center, gathering from as far away as 65 miles to enjoy a few hours with their colleagues. The hospital reserves a private dining room for the meeting, which features a guest speaker and has an average attendance of about twenty. Retired doctors in the area are reminded that there is always room for one more. Contact President Phillip G. Tullius, MD, Oklahoma City, or Dr. Foerster for information.

■ **An editorial by Irwin H. Brown, MD, Oklahoma City**, was published recently in *American Medical News*. "Must We Owe Our Souls to the Company Store?" which first appeared on the President's Page of the *Bulletin of the Oklahoma County Medical Society* (December 1987), was reprinted in the June 17 issue of *AMN*.

■ **Oklahoma City physician J. Darrel Smith, MD**, medical director of the OSMA Physician Recovery Committee, and his wife, Paula, have received the Caduceus Award for their work with impaired Oklahoma physicians and their families. The award is the highest honor bestowed by the Caduceus Foundation of Atlanta, Ga, a nonprofit organization formed to promote research and treatment for impaired health professionals.

■ **Oklahoma City plastic surgeon David W. Foerster, MD**, recently won two gold medals in the Sooner State Games, capturing first place in both the discus and shot put. The games were held in Oklahoma City on June 25 and 26.

■ **Perry A. Lambird, MD, Oklahoma City**, has won re-election to the American Medical Association's Council on Medical Service. At the June AMA meeting in Chicago, Dr Lambird garnered an overwhelming 83% of the vote. His sparkling "Perry A." campaign was clearly a hit with delegates, having made him their natural choice once again.

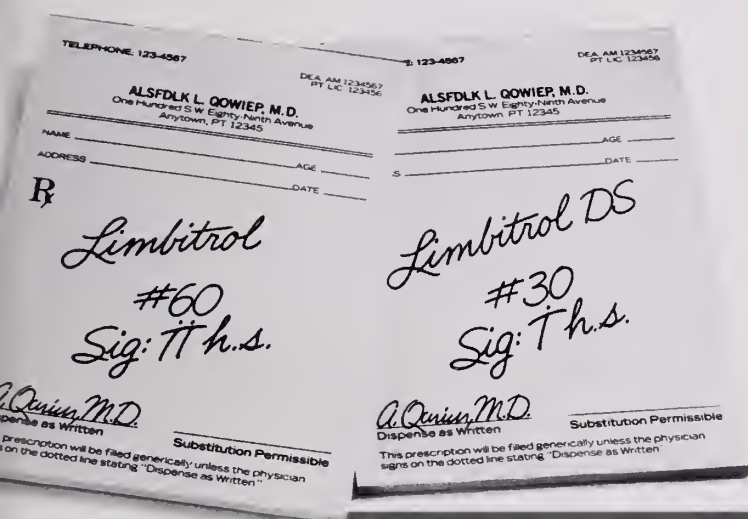
■ **"How Do We Care for the Caretakers? The Problem of Alcoholism and Drug Addiction in the Helping Professions"** is the title of the C.V. Ramana Saturday Seminar scheduled next month in Oklahoma City. The September 10 meeting will feature Richard C. Simons, MD, former president of the American Psychoanalytic Association, and will be held in the Presbyterian Hospital Auditorium from 9:00 AM to 3:00 PM. This CME offering meets the requirements for hour-for-hour credit in Category One of the AMA's Physician's Recognition Award. Registration is \$50 per person and the registration deadline is September 3. For complete details contact Kay Goebel, PhD, 405-947-0631.

■ **A Seminar entitled "Cardiology 1988: Managing Heart Disease in the Community"** will be presented by the St. Anthony Hospital Department of Cardiology in Oklahoma City on Saturday, August 27. The seminar will provide primary care physicians with practical clinical information concerning the diagnosis and management of patients with cardiovascular disease; participants will receive nine credit hours in Category One of the AMA's Physician's Recognition Award. Registration fee for the meeting, to be held at the Waterford Hotel, is \$50. Contact Linda Coventon, 405-272-7383 or 1-800-522-0320 before August 22.

■ **Paul B. Edmonds, MD, Midwest City** obstetrician-gynecologist, is the featured physician in a videotape made in May by the Video Journal of Obstetrics and Gynecology. The St. Louis organization produces and distributes instructional videotapes for the specialty's practitioners nationwide. Dr Edmonds was selected because of his expertise in treating urinary incontinence in women; his videotape demonstrates the repair of a paravaginal defect to correct urinary incontinence. □

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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP. *et al. Psychopharmacology* 61:217-225, Mar 22, 1979.

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**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

**Warnings:** Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (*e.g.*, operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

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Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

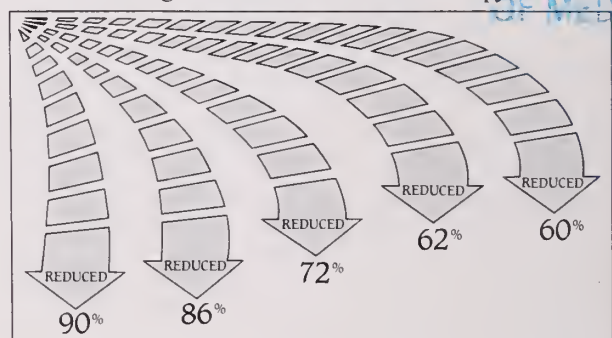
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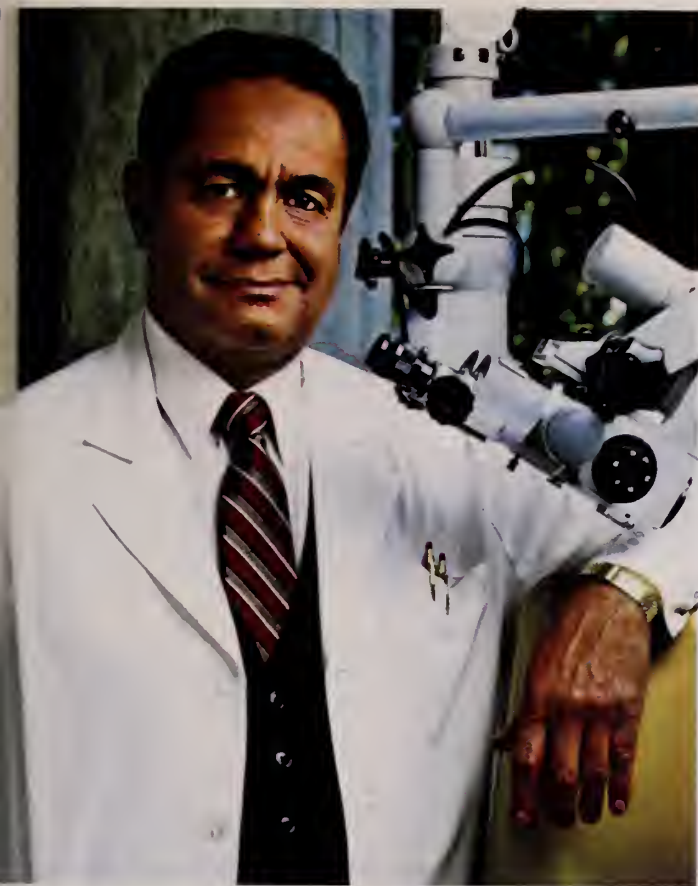
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## DALE L. TIPTON, M.D.

Associate Clinical Professor, Department of Otolaryngology, Head and Neck Surgery, University of California School of Medicine, San Francisco, California.

Chairman, Division of Otolaryngology, Franklin Hospital, San Francisco, California.

Lieutenant Colonel, U.S. Army Reserve.

**EDUCATION** University of California at Berkeley, A.B. Physiology; University of California School of Medicine, San Francisco, M.D. and Master of Science, Pharmacology.

**RESIDENCY** University of California School of Medicine, San Francisco: General Surgery — 2 years; Otolaryngology — 3 years.

**FELLOWSHIPS** National Institute of Health Fellow; Cancer Research Institute, University of California, San Francisco.

**OUTSTANDING ACHIEVEMENTS** Freshman Medical Student Research Award; Class President — 2nd year medical school; Student Body President — senior year medical school; Special Award by National Institute of Health to attend and present paper at International Congress of Otolaryngology in Tokyo, Japan; Chairman, Department of Otolaryngology, San Francisco General Hospital 1970-76; Chief of Medical Staff, Franklin Hospital 1982-84.



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Axid is indicated for maintenance therapy for duodenal ulcer patients, at a reduced dosage of 150 mg h.s. after healing of an active duodenal ulcer. The consequences of continuous therapy with Axid for longer than one year are not known.

**Contraindication:** Axid is contraindicated in patients with known hypersensitivity to the drug and should be used with caution in patients with hypersensitivity to other H<sub>2</sub>-receptor antagonists.

**Precautions, General:** 1. Symptomatic response to nizatidine therapy does not preclude the presence of gastric malignancy.

2. Because nizatidine is excreted primarily by the kidney, dosage should be reduced in patients with moderate to severe renal insufficiency.

3. Pharmacokinetic studies in patients with hepatorenal syndrome have not been done. Part of the dose of nizatidine is metabolized in the liver. In patients with normal renal function and uncomplicated hepatic dysfunction, the disposition of nizatidine is similar to that in normal subjects.

**Laboratory Tests:** False-positive tests for urobilinogen with Multistix<sup>®</sup> may occur during therapy with nizatidine.

**Drug Interactions:** No interactions have been observed between Axid and theophylline, chlorazepate, lorazepam, lidocaine, phenytoin, and warfarin. Axid does not inhibit the cytochrome P-450-linked drug-metabolizing enzyme system, therefore, drug interactions mediated by inhibition of hepatic metabolism are not expected to occur. In patients given very high doses (3,900 mg) of aspirin daily, increases in serum salicylate levels were seen when nizatidine, 150 mg b.i.d., was administered concurrently.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** A two-year oral carcinogenicity study in rats with doses as high as 500 mg/kg/day (about 80 times the recommended daily therapeutic dose) showed no evidence of a carcinogenic effect. There was a dose-related increase in the density of enterochromaffin-like (ECL) cells in the gastric oxyntic mucosa. In a two-year study in mice, there was no evidence of a carcinogenic effect in male mice, although hyperplastic nodules of the liver were increased in the high dose males compared to placebo. Female mice given the high dose of Axid (2,000 mg/kg/day, about 330 times the human dose) showed marginally statistically significant increases in hepatic carcinoma and hepatic nodular hyperplasia with no numerical increase seen in any of the other dose groups. The rate of hepatic carcinoma in the high dose animals was within the historical control limits seen for the strain of mice used. The female mice were given a dose larger than the maximum tolerated dose, as indicated by excessive (30%) weight decrement

compared to concurrent controls, and evidence of mild liver injury (transaminase elevations). The occurrence of a marginal finding at high dose only in animals given an excessive, and somewhat hepatotoxic dose, with no evidence of a carcinogenic effect in rats, male mice, and female mice (given up to 360 mg/kg/day, about 60 times the human dose), and a negative mutagenicity battery is not considered evidence of a carcinogenic potential for Axid.

Axid was not mutagenic in a battery of tests performed to evaluate its potential genetic toxicity, including bacterial mutation tests, unscheduled DNA synthesis, sister chromatid exchange, and the mouse lymphoma assay.

In a two-generation, prenatal and postnatal, fertility study in rats, doses of nizatidine up to 650 mg/kg/day produced no adverse effects on the reproductive performance of parental animals or their progeny.

**Pregnancy—Teratogenic Effects—Pregnancy Category C:** Oral reproduction studies in rats at doses up to 300 times the human dose, and in Dutch Belted rabbits at doses up to 55 times the human dose, revealed no evidence of impaired fertility or teratogenic effect, but, at a dose equivalent to 300 times the human dose, treated rabbits had abortions, decreased number of live fetuses, and depressed fetal weights. On intravenous administration to pregnant New Zealand White rabbits, nizatidine at 20 mg/kg produced cardiac enlargement, coarctation of the aortic arch, and cutaneous edema in one fetus and at 50 mg/kg it produced ventricular anomaly, distended abdomen, spina bifida, hydrocephaly, and enlarged heart in one fetus. There are, however, no adequate and well-controlled studies in pregnant women. It is also not known whether nizatidine can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Nizatidine should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nursing Mothers:** Nizatidine is secreted and concentrated in the milk of lactating rats. Pups reared by treated lactating rats had depressed growth rates. Although no studies have been conducted in lactating women, nizatidine is assumed to be secreted in human milk, and caution should be exercised when nizatidine is administered to nursing mothers.

**Pediatric Use—Safety and effectiveness in children have not been established.** Use in Elderly Patients—Ulcer healing rates in elderly patients are similar to those in younger age groups. The incidence rates of adverse events and laboratory test abnormalities are also similar to those seen in other age groups. Age alone may not be an important factor in the disposition of nizatidine. Elderly patients may have reduced renal function.

**Adverse Reactions:** Clinical trials of nizatidine included almost 5,000 patients given nizatidine in studies of varying durations. Domestic placebo-controlled trials included over 1,900 patients given nizatidine and over 1,300 given placebo. Among the more common adverse events in the domestic placebo-controlled trials, sweating (1% vs 0.2%), urticaria (0.5% vs 0.01%), and somnolence (2.4% vs 1.3%) were significantly more common in the nizatidine group. A variety of less common events was also reported; it was not possible to

determine whether these were caused by nizatidine.

**Hepatic:** Hepatocellular injury, evidenced by elevated liver enzyme tests (SGOT [AST], SGPT [ALT], or alkaline phosphatase), occurred in some patients possibly or probably related to nizatidine. In some cases, there was marked elevation of SGOT, SGPT enzymes (greater than 500 IU/L), and in a single instance, SGPT was greater than 2,000 IU/L. The overall rate of occurrences of elevated liver enzymes and elevations to three times the upper limit of normal, however, did not significantly differ from the rate of liver enzyme abnormalities in placebo-treated patients. All abnormalities were reversible after discontinuation of Axid.

**Cardiovascular:** In clinical pharmacology studies, short episodes of asymptomatic ventricular tachycardia occurred in two individuals administered Axid and in three untreated subjects.

**Endocrine:** Clinical pharmacology studies and controlled clinical trials showed no evidence of antiandrogenic activity due to Axid. Impotence and decreased libido were reported with equal frequency by patients who received Axid and by those given placebo. Rare reports of gynecomastia occurred.

**Hematologic:** Fatal thrombocytopenia was reported in a patient who was treated with Axid and another H<sub>2</sub>-receptor antagonist. On previous occasions, this patient had experienced thrombocytopenia while taking other drugs.

**Integumentary:** Sweating and urticaria were reported significantly more frequently in nizatidine than in placebo patients. Rash and exfoliative dermatitis were also reported.

**Other:** Hyperuricemia unassociated with gout or nephrolithiasis was reported.

**Overdosage:** There is little clinical experience with overdosage of Axid in humans. If overdosage occurs, use of activated charcoal, emesis, or lavage should be considered along with clinical monitoring and supportive therapy. Renal dialysis for four to six hours increased plasma clearance by approximately 84%.

Test animals that received large doses of nizatidine have exhibited cholinergic-type effects, including lacrimation, salivation, emesis, miosis, and diarrhea. Single oral doses of 800 mg/kg in dogs and of 1,200 mg/kg in monkeys were not lethal. Intravenous LD<sub>50</sub> values in the rat and mouse were 301 mg/kg and 232 mg/kg respectively.

Axid<sup>®</sup> (nizatidine, Lilly)



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**CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone.

### **WARNINGS:**

**Allergic-Type Reaction:** VICODIN contains sodium metabisulfite, a sulfite that may cause allergic-type reactions including anaphylactic symptoms and life-threatening or less severe asthmatic episodes in certain susceptible people. The overall prevalence of sulfite sensitivity in the general population is unknown and probably low. Sulfite sensitivity is seen more frequently in asthmatic than non-asthmatic people.

**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing. If significant respiratory depression occurs, it may be antagonized by the use of naloxone hydrochloride. (See ADVERSE REACTIONS: Respiratory Depression).

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

### **PRECAUTIONS:**

**Special Risk Patients:** As with any narcotic analgesic agent, VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. The usual precautions should be observed and the possibility of respiratory depression should be kept in mind.

**Information for Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex, as with all narcotics, caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** Patients receiving other narcotic analgesics, antipsychotics, anxiolytic agents, or other CNS depressants (including alcohol) concomitantly with VICODIN may exhibit an additive CNS depression. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The withdrawal signs include irritability and excessive crying, tremors, hyperactive reflexes, increased respiratory rate, increased stools, sneezing, yawning, vomiting, and fever. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose. There is no consensus on the best method of managing withdrawal. Chlorpromazine 0.7 to 1.0 mg/kg q6h, and paregoric 2 to 4 drops/kg q4h, have been used to treat withdrawal symptoms in infants. The duration of therapy is 4 to 28 days, with the dosage decreased as tolerated.

**Labor and Delivery:** As with all narcotics, administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from VICODIN, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

### **ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. The antiemetic phenothiazines are useful in suppressing these effects; however, some phenothiazine derivatives seem to be antianalgesic and to increase the amount of narcotic required to produce pain relief, while other phenothiazines reduce the amount of narcotic required to produce a given level of analgesia. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Urteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use and the incidence of untoward effects is dose related.

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Revised June, 1987

5803


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CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2: 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93: 588-96.

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1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978  
2. Beaver, WT *Arch Intern Med*, 141: 293-300, 1981.

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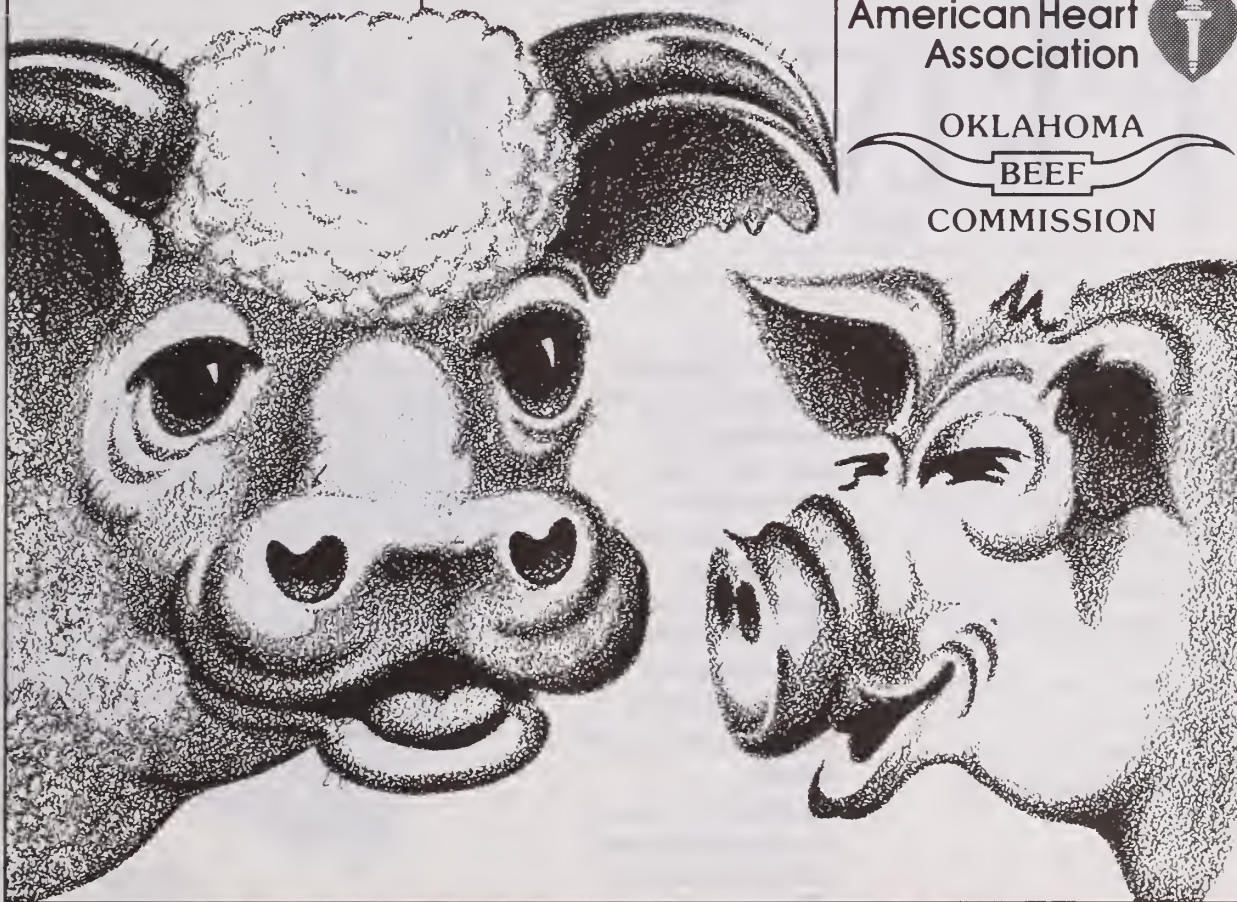
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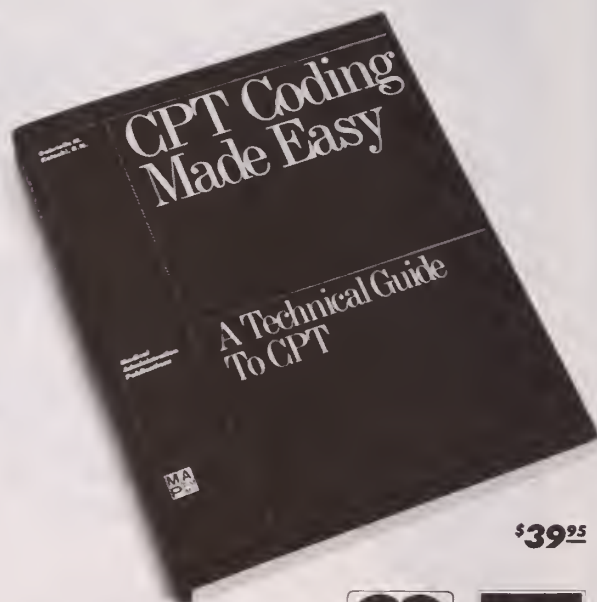
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### Reforming Reform

As more and more tort reform statutes are declared invalid or unconstitutional, it becomes clear that our salvation, as a profession and possibly as a nation, lies in our ability to educate the public, that amorphous mass from which juries are picked. Had we devoted more of our efforts and dollars to this task a generation or two ago, tort reform might never have become an issue.

Naive as it may seem, I believe the citizens of this nation, once apprised of the good and bad aspects of any issue, have the wisdom and strength to ensure that good prevails. Unfortunately, our citizens have not been apprised of the very real, very bad, and very seditious results of unbridled torts litigation. It can and will reduce the quality and availability of medical care in this nation. It can and will bring about destruction of this nation's industry and precipitate our return to the Dark Ages. It can and will transfer from our system of government and economics every shred of initiative and leadership to other nations, less concerned with civil rights and individual freedom.

All these bad things not only can and will happen, they *are* happening. The dismantling of our industries, our professions, and our systems of justice and economics is underway. The property and wealth of the entire nation are shifting to the insatiable, greedy hands of claims lawyers and insurance companies.

So let's get on with the enormous task of educating and informing the public, preparing every

individual for that moment when he or she will exercise the rights of a juror. Let's stop wasting our resources of time and money in futile efforts to influence legislatures which are packed with lawyers. Let's influence juries, the only body in our society totally immune to the presence of a lawyer.

But let's influence jurors before they form juries. Make them aware of their responsibilities and their rights, inform them of their options and alternatives in torts litigation. Teach them how to anticipate the results of their decisions; how to prevent abuse of the judicial process; how to distinguish facts from histrionics; how to ensure that punishment does not constitute a reward; how to make sure that the victims of neglect are justly compensated; how to separate involvement from culpability; guilt from tribute.

It can be done in spite of the adversarial media, in spite of the bleeding hearts, and in spite of the claims attorneys. We can promote, sponsor, and participate in juror education seminars, public forums on product liability, town meetings on medical malpractice. We can eventually convince the people of this nation that the crisis in torts litigation involves more than medical malpractice. It involves the very survival of our nation.

We *can* put a stop to this march to oblivion, but we have to start now.

It's already very late.

—MRJ

## PRESIDENT'S PAGE

Over the long span of human history, the medical profession and society have continuously renegotiated the contract between the individual physician and the particular patient. Always the patient desires life to be free of pain and disability, and to that end the physician proffers an expert knowledge of disease, anatomy, and chemistry. Within this broad frame has evolved an infinite variety of exchanges that have given a wide range of satisfactions or dissatisfactions to the contracting parties.



For most of human history, the physician's offerings have been meager, and patient dissatisfaction high, even when tempered with sparse expectations. Presently, and for the past two or three generations, the physician's effectiveness has been relatively quite high, as many painful and fatal diseases have been controlled. However, patient dissatisfaction has not been eliminated, and now is often expressed: "Is medical care worth the money it costs?" This question is aggressively asked today by patients, government, and sundry third-party payers.

Philosophy aside, the practical answer to the question turns on the quality of the medical care rendered in a particular case. Therein lies a problem, as the definition of good quality medical care includes a major subjective element that puts it outside the rules of mathematical accounting. Morbidity rates, mortality rates, outcome audits, treatment cost ratios, and many other numbers can be generated in this age of computers and calculators. But there is no real number value for patient contentment nor for physician emotional satisfaction in the medical episode. Statistics can never answer the question of worth.

The quality of medical care, like a well-cut diamond, has so many facets that all cannot be seen at once. The principal facet should be viewed from the patient's perspective, but many other viewpoints must also be evaluated to judge correctly the worth of an episode of medical care.

Obviously, medical care should be accurately addressed to the patient's particular disease and to the unique emotional state of the individual. It should be delivered at a time and place that are minimally disruptive of the patient's life and work. Medical education of the patient often is an integral element of quality medical care. In an episode of

quality medical care, there is free exchange between two free individuals, even if a patient's contribution sometimes can only be a reaffirmation of the physician's altruism.

Always, a physician's assessment is necessary to rate the quality of medical care. Medicine is a highly complex body of knowledge, and only a physician understands what is possible, impossible, and probable in medical events. Truly, medical care results from the exercise of observation, training, thought, judgment, and communication of such complexity that each episode of patient contact can result in a creative act that is comparable to an inspired painting by a master artist.

Peer review has a role to play in grading the quality of medical care. There is an ancient and tested ritual of peer judgment of the physician's actions. Only another similar physician can determine if the physician's judgment of possible, impossible, and probable was reasonable at the time of the event. True peer review is motivated by correct patient care, seasoned with medical science, and it cannot have an economic motivation. It may have an economic effect, as the best patient care is often the least costly in the end. Peer review with an economic motivation is instantly contaminated with the viruses of reviewer prejudice, paranoia, and pride. True peer review is solely an educational tool, never a fiscal tool.

The quality of medical care delivered cannot be assessed, except in a most negative sense, by a chart review, or by professionals other than a physician. Complete, well-written charts are a desiderata of most forms of medical practice today, but a hiatus in a chart is not a reliable sign of poor medical care. Any criticisms of medical decisions that are advanced by statisticians or other nonphysicians are of limited value in the search for truth and the definition of quality medical care.

Government licensing authority is a necessary ingredient of good quality medical care. However, the politician's perennial temptation to control physicians through the licensing process, and to exploit the medical profession for political and economic purposes, must be resisted wherever it appears. I believe the ideal form of resistance is to deliver — daily — to every patient, the kind of medical care that that patient truly needs.

The quality of medical care rulebook must be written by patients and physicians only.

*Ray V. McIntyre, M.D.*



# Inpatient vs Outpatient Treatment of Renal Calculi Utilizing Extracorporeal Shock Wave Lithotripsy

James E. Mays, PG-4; James R. Wendelken, MD; Robert Petrone, PA-C

---

*The records and data base of the first 383 patients undergoing extracorporeal shock wave lithotripsy (ESWL) at Oklahoma Lithotripsy Center were reviewed. We compared outpatient to inpatient stone burden, co-morbidity, peri-operative morbidity, complication rate, and success rate.*

*The results of this study demonstrate that outpatient ESWL is safe, presents no greater risk of complications than inpatient ESWL treatment, and provides a cost-effective treatment for upper urinary tract calculi.*

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Extracorporeal shock wave lithotripsy (ESWL) is rapidly becoming the preferred method of treatment for most upper urinary tract calculi. This noninvasive technique is associated with a high success rate and low morbidity.<sup>1</sup> There exists a controversy as to the management of patients treated with ESWL. The Food and Drug Administration (FDA) no longer requires post-treatment hospitalization of ESWL patients, and many lithotripsy centers across the United States are attempting to treat all patients as outpatients.<sup>2</sup> There is little known

regarding the increased risk, if any, of outpatient lithotripsy, the basis upon which referring urologists choose in- or outpatient treatment status, the comparable rates of complications experienced by in- and outpatients, or the specific categories of patients in whom outpatient lithotripsy may not be advantageous.

The principle of ESWL is to generate an 18,000 to 24,000 volt electrical discharge across an underwater spark gap and reflect the resultant shock wave, by using a semi-ellipsoid, to a focal area of approximately 1.5 cm diameter, where the kidney stone is positioned (Fig). The patient is positioned with the help of a hydraulic positioning system and two fluoroscopic monitors. The shock wave needs an acoustical impedance interface before the energy wave can be absorbed. Human tissue does not cause a significant acoustical impedance in the tub of water because the tissue itself is 75% water. When the shock wave strikes a dense substance like a kidney stone, however, an acoustical impedance interface results in absorption of energy by the stone. This results in sheer forces within the calculus, causing stone fragmentation. We have reviewed our patient data in an attempt to define which categories of patients would provide suitable candidates for outpatient ESWL.

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## MATERIALS AND METHODS

A total of 383 patients were treated with the HM-3 Dornier lithotripter from December 1, 1986, to June 30, 1987, at the Oklahoma Lithotripsy Center in Oklahoma City. A total of 160 of these patients were treated as outpatients, with 167 treatments of ESWL. Each referring urologist made the decision as to which patients were treated as outpatients.

Evaluation of each patient included a pre-treatment history and physical examination, laboratory evaluation including urine culture, complete blood count, bleeding studies, Chem 25, and in patients 35 years of age or older, an electrocardiogram. Included in our pre-operative evaluation was a listing of any clinically significant co-morbidities these patients had prior to their ESWL.

In comparing general medical condition of patients for predisposing factors in order to differentiate outpatient from inpatient ESWL, we looked at cardiovascular disease, diabetes, pulmonary disease (COPD), hypertension, stroke, cancer, and gastrointestinal problems. The patients' charts were reviewed to determine the stone burden, total number of treatments administered, type of anesthesia, postprocedural complications, postprocedural treatments, and status of the patient at a six-week follow-up.

*Stone burden* was defined as the sum of the longest axial diameter of all stones treated, expressed in millimeters.<sup>3</sup> *Peri-operative morbidity* was defined as nausea, vomiting, or need for pain medication, or unplanned admission for nausea, vomiting, or pain.

Both patients and physicians received a separate

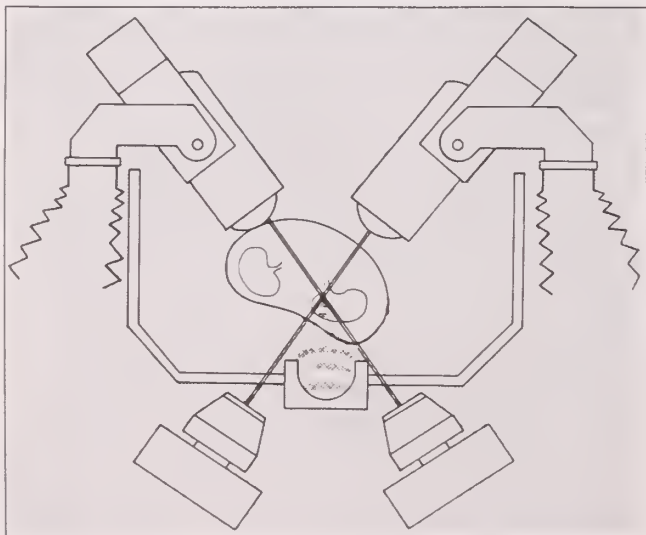


Figure. Diagram of lithotripter and patient

Table 1. Age Distributions

Patient Status	Mean	Range of Age
Inpatients	51.6 years	12-88 years
Outpatients	47.8 years	17-84 years

questionnaire six weeks following the procedure regarding the postprocedural clinical course. The patient provided information regarding pain, nausea, vomiting, and complications, if any. The physician provided information regarding readmission within 72 hours of ESWL, whether secondary procedures were required, what complications occurred, and the status of the stones within the urinary tract at six weeks postprocedure. The postprocedure kidney, ureter, and bladder (KUB) evaluation was done within this six-week period by the referring urologist. Clinically insignificant fragments were defined as asymptomatic stones or fragments less than 2 mm in greatest diameter. Follow-up was completed at six weeks on all patients treated as outpatients in this study. There were 23 referring urologists treating patients during this period.

Test for differences between inpatients and outpatients were conducted using either the student t-test or Pearson chi square statistic, as appropriate. Statistical significance was determined to be a *p* value of less than 0.05.

## RESULTS

A total of 383 patients were treated; 223 of these were inpatients and 160 were outpatients. The age distributions for inpatients and outpatients are listed in Table 1. The mean age of outpatients was significantly younger than that of the inpatient group ( $p = 0.02$ ).

There were 235 males and 148 females in the total group. Of these, 125 males and 98 females were inpatients, and 110 males and 50 females were outpatients. A single treatment was performed on 361 (94%) patients, with 22 (5.7%) patients requiring repeat ESWL. There was no statistically significant difference in the proportion of outpatients requiring repeat ESWL (4.4%) when compared to the proportion of inpatients (6.7%).

Where a second treatment was required, the procedure was usually performed within one month of the first treatment. The initial pretreatment evaluation was not repeated prior to the second treatment. No patient in this study required more than two treatments.

As would be anticipated, the inpatient group had a significantly higher incidence of associated illnesses ( $p = 0.001$ ).

Table 2. Stone Burden

Patient Status	Mean	Range
Inpatient	16.5 mm	3.0-73.0 mm
Outpatient	14.6 mm	3.0-70.0 mm

Stone burden of both inpatient and outpatient groups is listed in Table 2. As reflected in the table, there was no statistically significant difference in the mean stone burden between the inpatient and outpatient groups.

There were no intra-operative complications. Twenty-five (11%) of the inpatients and 20 (13%) of the outpatients experienced peri-operative morbidity.

Postoperative complications are listed in Table 3. Of the 12 outpatients (7.5%) with complications, only 5 required readmission. The patients with sepsis/urinary tract infection and hematuria greater than 3 days had complications closely related to their treatment. The patient who developed hematemesis had a known history of peptic ulcer disease. He was not on ulcer-specific medication prior to his treatment. This patient developed hematemesis after his second ESWL. The other patient, a diabetic, was well controlled prior to treatment and did not have any postprocedural mitigating circumstances precipitating her ketoacidosis (ie, urinary tract infection, sepsis, nausea, or vomiting).

We examined the ancillary procedures that were required after ESWL for the inpatient and outpatient groups. There was no difference in the proportion of procedures done in the inpatient group (15%) compared to the outpatient group (13%). The procedures are outlined in Table 4.

The inpatient who required open ureterolithotomy did so for ureteral obstruction secondary to stone fragments. Both of the percutaneous nephrolithotomies were planned. The percutaneous nephrostomy was for ureteral obstruction.

Table 3. Complications of the 383 Patients

Complication	Inpatient	Outpatient
Sepsis/urinary tract infection	10 (5%)	5 (3%)
Hematuria greater than 3 days	2 (2%)	3 (2%)
Perirenal hematoma	1 (<1%)	0 (0%)
Anesthesia complication	1 (<1%)	2 (1%)
Diabetic ketoacidosis	0 (0%)	1 (<1%)
Hematemesis	0 (0%)	1 (<1%)
Total	14 (6.3%)	12 (7.5%)

\*Not all outpatients with complications were readmitted

Table 4. Post-ESWL Ancillary Procedures

Procedure	Inpatient	Outpatient
Ureterorenoscopy	3 (1%)	6 (3.8%)
Cystoscopy with ureteral stenting	5 (2%)	4 (2.5%)
Cystoscopy with stone manipulation	8 (3.6%)	3 (1.9%)
Percutaneous nephrostomy	1 (<1%)	0 (0%)
Percutaneous nephrolithotomy	1 (<1%)	1 (<1%)
Open surgery*	1 (<1%)	0 (0%)
Repeat ESWL	15 (6.7%)	7 (4.4%)

\*Ureterolithotomy

The outpatient ancillary procedure rate was 13%, which compared favorably with the inpatient group rate of 15%. We list our outpatient group as either no stone (74%) or clinically insignificant residual fragments (13%), for an 87% success rate. A total of 13% of the patients had clinically significant residual stone disease; however, of these patients, 11% had partial fragmentation, with particles greater than or equal to 5 mm. Only 2% had no objective response to ESWL. There were 13 patients who did not return for follow-up KUB evaluation within the six-week postprocedure period.

(A total of 735 patients have been treated with ESWL at the Oklahoma Lithotripsy Center as of February, 1988. Of these patients, approximately 50% were treated as outpatients.)

## DISCUSSION

The significant factors influencing the referring urologist to treat one patient as an inpatient and another patient as an outpatient were age and known, pre-existing co-morbidity. These factors inherently go hand-in-hand, since the older patient (age > 65 years) is more likely to have a higher incidence of co-morbidity ( $p = 0.0001$ ). The complication rate (Table 3) did not reflect that these patients had a greater rate of complications compared to the outpatient group. We noted that the inpatients had no special monitoring or any unusual care given to them beyond that given any patient admitted for routine observation. These patients were not in intensive care units, nor were they monitored on postcoronary care units. When we looked specifically at the outpatients who had significant co-morbidity, and at their complication rate, we found that none of the complications were related to their pre-existing co-morbidity, except in the patient who was an insulin-dependent diabetic and developed ketoacidosis 72 hours after the procedure. We do not




believe that this was actually secondary to the procedure.

It is interesting to note that in comparing outpatient stone burden with respect to complication, there was no greater complication rate among patients with larger stone burdens in this group. When stone burden was evaluated in the inpatient group, we found that the inpatients with complications had significantly larger stone burden values ( $p=0.04$ ). It is hard to explain this finding, given that there was no difference in overall stone burden between the two groups.

Our experience with the first 383 patients at the Oklahoma Lithotripsy Center suggests that outpatient ESWL is a safe and effective means of treating upper urinary tract stones. The factors that have influenced the referring urologists in this study appear to be the patient's age and co-morbidity. We have found that the group of older patients with a significantly higher co-morbidity tolerated the treatment as well as the younger patients, and there was no difference in the percentage of complications or peri-operative morbidity experienced by either group.

The morbidity rate, as measured by the number of complications in our outpatient group (7.5%) and readmission rates (6.8%), is acceptable and compares well with other studies reported (references). It appears that there is little risk associated with outpatient ESWL and that current inpatient care does not influence the observed complication rates. Our outpatient success rate of 86% is comparable to the success rate in most studies reported, which ranges from 80% to 90%, using similar criteria.

## CONCLUSION

We have shown that outpatient lithotripsy is a safe and effective means of treating upper urinary tract stones. Post-treatment hospitalization did not demonstrate a reduction in the incidence of peri-operative morbidity or complication rate. Outpatient ESWL is inherently cost effective when comparing the overnight stay of a patient who does not need to be hospitalized. 

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# Effect of an Intensive Control Program in a Countywide Pertussis Outbreak

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*In April 1984, an outbreak of pertussis occurred in Pottawatomie County, Oklahoma. Efforts to control the outbreak revealed that adults may play an important role in the transmission of pertussis, and that it can be difficult to increase community levels of immunization through an intense media campaign, even in the face of a large pertussis outbreak.*

During the first three months of 1984, Oklahoma experienced an increase in pertussis cases compared to the same period in 1983. The control efforts utilized in 1983, which included aggressive case and contact follow-up, did not result in a decline of pertussis incidence, or an increase in vaccine administered.<sup>1</sup> Because of the failure of that approach, we developed an outbreak control plan which was to be implemented in 1984 upon receipt of the first report of a case of pertussis in a county which had no previous reports in 1984. It involved an intense media campaign to alert the residents of that county about the outbreak, with the goal of increasing immunization levels among preschoolers.

In early April, 1984, two laboratory-confirmed cases of pertussis were reported from Pottawatomie County, triggering the implementation of the countywide control plan.

This report details the effect of the intensive countywide pertussis control program in Pottawatomie County, Oklahoma. It has a population of 60,800, with the largest concentration of people living in the city of Shawnee, population 29,100.

## METHODS

A case of pertussis was defined as a person who met one of the following criteria: (1) laboratory-confirmed case: a positive laboratory test for pertussis, ie, culture and/or direct immunofluorescent antibody (DFA) test of nasopharyngeal specimen; (2) clinical case: a clinical diagnosis of pertussis by a physician; or (3) epidemiologically linked case: a cough of two weeks' duration or longer with a history of direct contact with a laboratory-confirmed case of pertussis.

A training program about pertussis was conducted for county health department staff, Indian Health Service nurses, and hospital infection control nurses in the county. The Oklahoma State Department of Health (OSDH) organized a media campaign designed to alert the public about the outbreak. Each physician in the county was contacted by health department personnel and asked to immediately

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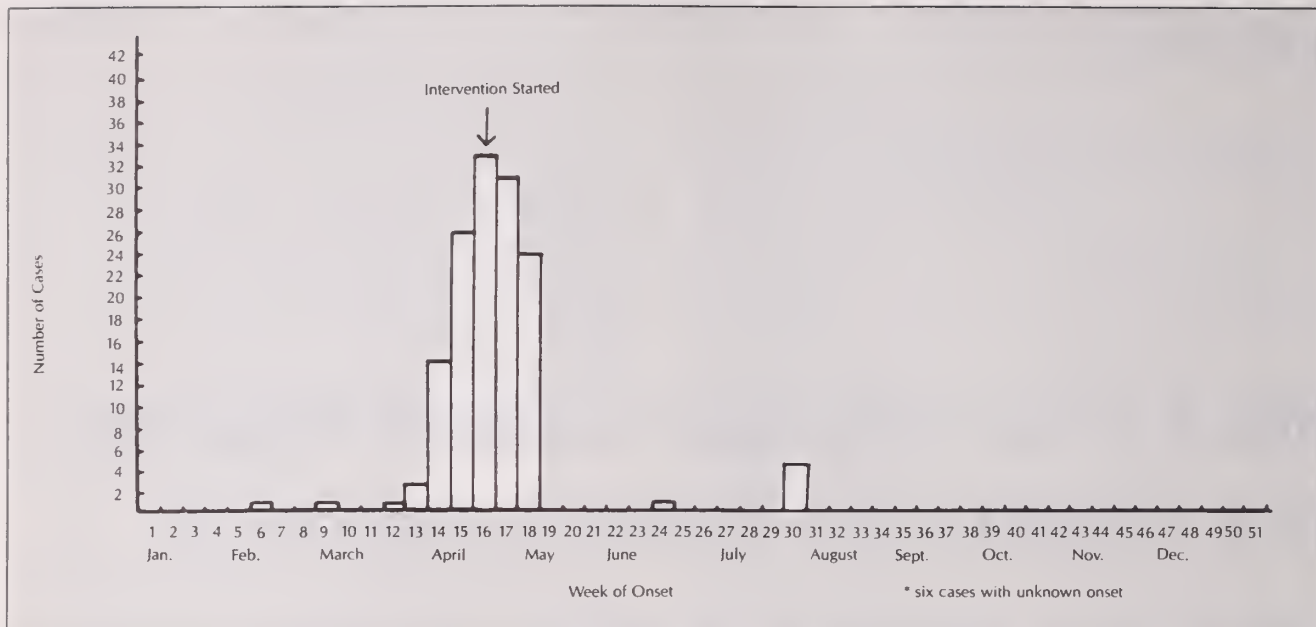


Figure 1. Cases of Pertussis by Weeks of Onset,\* Pottawatomie County, Oklahoma, 1984

report suspected cases of pertussis so that early follow-up of cases could be initiated. Flyers describing the disease and the need for immunization were produced and distributed to parents through day-care centers, elementary schools, churches, grocery stores, and civic organizations.

Each person suspected of having pertussis was interviewed for information about his/her symptoms and onset date. Detailed information was collected on all household members and anyone with whom the suspected case had direct face-to-face contact since the onset of cough. Additional information obtained included number of previous diphtheria tetanus, and pertussis (DTP) immunizations received and whether anyone listed as a contact was coughing. This information was confirmed by personal interviews with everyone listed as a contact.

We attempted to obtain nasopharyngeal swab specimens for the DFA test and for culture from all contacts who had cough. The Regan-Lowe media formulation using oxoid charcoal agar with defibrinated horse blood and cephalixin was used for the transport and isolation media.<sup>2</sup> Duplicate nasopharyngeal swabs were obtained on each patient. One swab was streaked on a glass slide for the DFA and the other swab was placed in the Regan-Lowe media for transport and subcultured onto the same media formulation. Cultures were identified by DFA testing of colonies with morphology suggestive of *Bordetella pertussis*. Blood specimens for serologic studies also were obtained from adults who were suspected cases, in order to rule out

other infectious causes. From most cases only a single convalescent specimen was obtained. These specimens were tested for mycoplasma and adenoviruses by the complement fixation test at the OSDH laboratory.<sup>3</sup>

Oral erythromycin (50 mg/kg/day; or 250 mg qid in an adult) for 10 to 14 days was the recommended treatment for all confirmed cases.<sup>4,5</sup> Erythromycin prophylaxis was also recommended for direct contacts less than one year of age, for direct contacts less than seven years old who had not completed the four-dose series of DTP vaccine, and for all contacts who had cough, regardless of age. DTP vaccine was administered to all contacts less than seven years of age if they had not had at least four doses or had not received a dose of DTP vaccine in the last three years.<sup>4</sup>

Neighborhood surveys were conducted to determine DTP immunization levels in a neighborhood in which a case lived and in an adjacent neighborhood where no cases had been reported. The control neighborhood was chosen because of its proximity to the case neighborhood and its socioeconomic similarities. Two teams surveyed each neighborhood and attempted to contact fifteen households with children less than seven years old to document their immunizations, whether they attended school or day-care, and to identify persons with respiratory illnesses.

Two additional surveys were conducted to evaluate preschool immunization levels in the county: (1) The local health department's immunization file was reviewed. A ten percent systematic

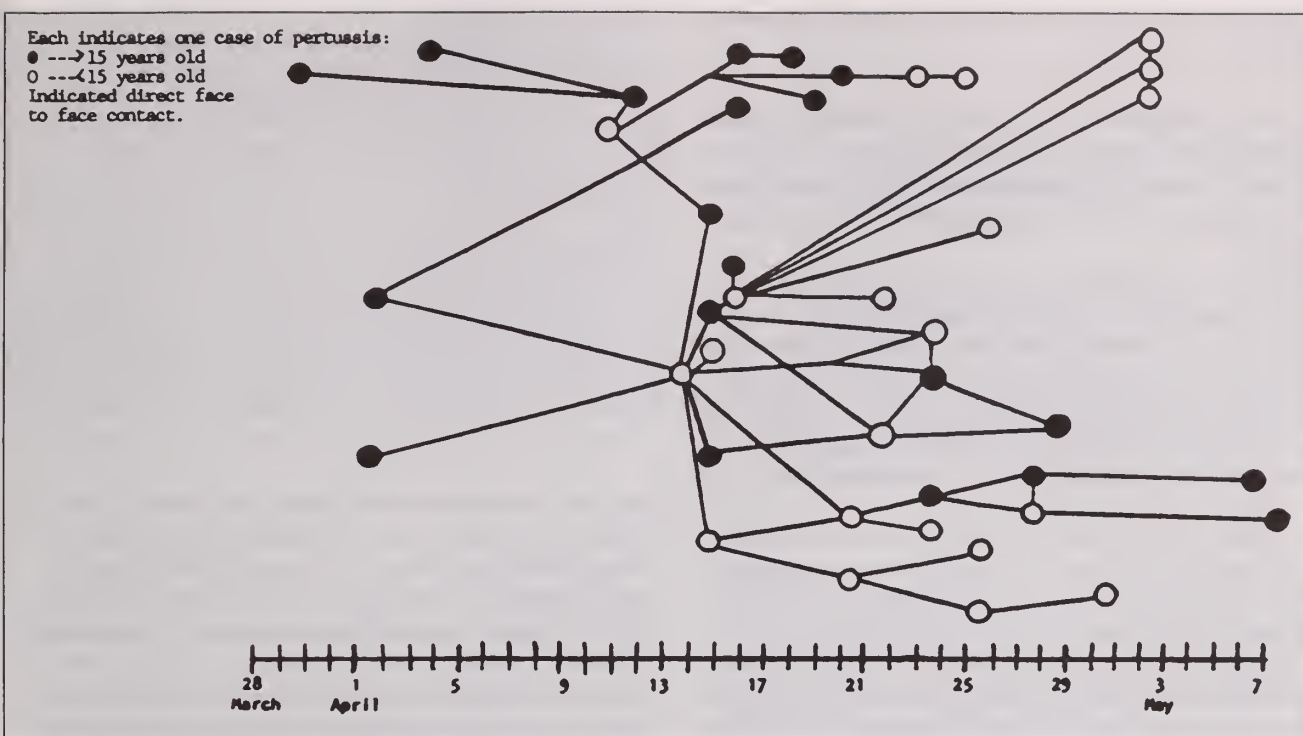


Figure 2. Pottawatomie County, Sample Chain of Transmission

sample of parents of children whose names were in the immunization file was contacted by telephone or a home visit to document immunization status and to identify upper respiratory illnesses. (2) A twenty percent systematic sample of children born at the two hospitals in Shawnee in the previous six months was identified and attempts were made to contact each person in the sample by telephone or home visit to determine the immunization status, and to identify upper respiratory illnesses.

Whenever a case of pertussis occurred in a school or day-care center, the immunization records were immediately reviewed to identify susceptible contacts and to provide additional immunization information. Students with cough were excluded until they had been evaluated either by a physician or by a public health nurse. If pertussis was suspected, they were excluded until they had been treated with erythromycin for five days, or until three weeks after onset of cough. Children under the age of seven years who were identified as needing an additional dose of DTP vaccine were referred for vaccination.

In order to compare the number of DTP immunizations given in 1984 with the same period in 1983, a survey of local private physician offices and the local health department was conducted to document the number of DTP doses administered daily. This information was compared to the corresponding data from 1983.

Pertussis vaccine efficacy (VE) was calculated by a standard formula:  $VE = (\text{Attack Rate (AR) among unvaccinated} - \text{AR among vaccinated}) \div \text{AR among unvaccinated}$ .

## RESULTS

During 1984, a total of 146 cases of pertussis was reported in residents of Pottawatomie county. Of the 146 cases, 138 occurred during April and May. Of the 146 cases, 34 (23%) were confirmed by DFA test, 5 (3%) by culture, and 9 (6%) by clinical diagnosis; 98 (67%) included cough of at least two weeks and were epidemiologically linked to another confirmed case. The peak incidence occurred during the third week in April, when 33 cases had cough onset (Fig 1). Sixty percent of the patients were female. Of the 90 patients for whom race was documented, 62 (69%) were white, 23 (26%) Indian, and 5 (5%) black. Sixty-four (44%) of the 146 patients were over 18 years of age, 26 (18%) were in the 7-17 year age group, and 56 (38%) were less than seven years of age (an attack rate of 1% for residents of the county in that age group). Eight (5%) of the patients were hospitalized; one patient three years of age had seizures, and two children, two and three years of age, had encephalopathy. The hospitalization rate among infants and preschool children through four years of age was 10.6% (5 of 47).

Eleven chains of transmission were identified involving 140 persons in households, extended



families, neighbors, and friends. In 10 (91%), there was at least one person 15 years of age or older. In six (55%) chains, an adult was identified as the index case; in one chain, 21 adult cases were identified (Fig 2).

Fifteen cases occurred in two day-care centers, and 18 cases occurred in four elementary schools and one junior high school. Case investigations could not document any cases that were transmitted in the schools and day-care settings. In each instance, the likely source of transmission could be traced to household, close playmate, or extended family contact.

A majority of the cases lived in the southwest quadrant of Shawnee. The neighborhood surveys revealed significantly lower immunization levels in the case neighborhood (19 of 28 had 3 or more doses of DTP vaccine, 68%) compared to the control neighborhood (25 of 28 had 3 or more doses of DTP vaccine, 89%) ( $p=0.04$ , Fisher's exact, odds ratio, 0.25, 95% confidence interval 0.06-1.0). Of the 58 local health department immunization records chosen for review, 23 (40%) were unlocatable. Of the 35 (60%) individuals who were located, 29 (83%) were adequately immunized. Of the 65 infants followed in the hospital newborn survey, 17 (26%) were not located; of those we contacted, 54% were adequately immunized.

Serologic examinations for mycoplasma and adenovirus of 52 specimens collected from symptomatic adults were performed at the OSDH laboratory. One (2%) specimen had a 1:256 (CF) convalescent titer for mycoplasma; the acute specimen was not obtained. The remaining 51 (98%) showed no evidence of recent mycoplasma or adenovirus infection; all had titers  $\leq 1:64$ .<sup>6,7</sup>

An active influenza surveillance program in Oklahoma had not reported any increase in influenzalike illness (defined as temperature  $\geq 101^\circ$  with cough with no known cause) in the state during April and May, 1984. The last confirmed influenza isolate at the OSDH laboratory in 1984 was in a patient whose onset of symptoms occurred in early February.

Data collected from the five private physicians' offices and the local health department revealed an increase in daily DTP administration, compared to the corresponding weeks in 1983. The peak number of doses administered occurred on April 4. During the five-week control effort, five physicians and the county health department administered 803 doses of DTP vaccine, compared with 351 in the same period in the previous year (Table), a 2.3-fold increase.

Based upon projections from the 1984 census

Table. Number of Doses of DTP Vaccine Administered in Physicians' Offices and at the Pottawatomie County Health Department for the Period April 16 to May 25, 1983 and 1984

	1983	1984
Physicians' offices	303	374
Health department	48*	429
Total	351	803

\*Estimates made from monthly vaccine usage reports

figures, 4,912 preschool age children (0-4 years) resided in Pottawatomie County.<sup>8</sup> If 83% were adequately immunized (3 or more DTP doses, as found in the health department record reviews), then 835 (17%) had an inadequate number of immunizations. The control effort and media campaign resulted in 452 more doses of DTP vaccine being given compared with the previous year; this accounted for about 54% (452/835) of the pre-school population that was deficient in immunization.

In order to calculate pertussis vaccine efficacy, we used the same estimate (83%) of adequate immunization levels. Of the 56 pertussis patients less than seven years of age, 48 had known immunization status; 29 (60%) of the 48 patients had received 3 or more doses of DTP vaccine. Thus, the attack rate for pertussis among adequately vaccinated children was 29/4077 (7.1 per 1000 children), compared with 19/835 (22.8 per 1000 children) for inadequately vaccinated children (2 or fewer doses of DTP vaccine). Based upon these figures, the pertussis vaccine efficacy was 68.9%. If 89% of preschool age children were adequately vaccinated (as measured in the control group neighborhood survey), then the calculated vaccine efficacy was 81.2%.

## DISCUSSION

We recognize that all of the cases in this outbreak may not have been pertussis. However, their clinical picture was consistent with pertussis, laboratory tests supported the diagnosis of pertussis, and serologic specimens failed to identify infection with adenovirus or mycoplasma, which also cause outbreaks of respiratory illness. The fact that schools and day-care centers were not sources of transmission also supports pertussis as the cause, since there were high levels of DTP immunizations in these settings. If the outbreak had been caused by another organism, the schools and day-care centers probably would have experienced higher attack rates. Although

cases were identified in these settings, their sources were traced to exposure by household contacts, or neighborhood playmates outside the school or day-care center.

The outbreak in Pottawatomie County indicates that pertussis is substantially under-reported. Epidemiologic investigations identified large chains of transmission, with a sizable proportion of adults. The highest attack rate for cases of pertussis occurred in children less than four years old, predominately in patients less than one year old. This is consistent with other studies.<sup>1,9</sup> The identification of cases among adults is also consistent with data collected in previous outbreaks.<sup>1,10-13</sup>

This investigation underscores the difficulty of controlling a pertussis outbreak, even if the effort is begun early in the course of the outbreak, probably in part because of the modified symptoms which older and previously immunized individuals sometimes exhibit.<sup>10-13</sup> We found that implementing effective control measures was costly. The control measures during this outbreak lasted five weeks, utilizing 15 public health nurses and four other state health department employees, as well as clerical and administrative support staff. We estimate the cost in salaries and supplies to have been approximately \$24,950.

The vaccine efficacy that we calculated is a minimum estimate. By including children who may have been partially immunized (ie, one or two doses of DTP vaccine) in the comparison group, the differences in the two groups were minimized. Nevertheless, the surveys demonstrate substantial efficacy of pertussis vaccine. The lack of transmission in schools, where pertussis immunization levels are high, adds support to this finding.

Our findings of low immunization levels among cases and in the case neighborhood underline the importance of preventing pertussis by ensuring high immunization levels among the preschool population. Attempting to raise immunization levels during the outbreak met with only modest success. Only about 50% of the inadequately immunized children less than seven years old in Pottawatomie County received a dose of vaccine during the outbreak.

Clearly, maintaining high immunization levels among the preschool population in order to prevent a pertussis outbreak is more efficient than trying to control an outbreak after it begins. □

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# Rural Physicians Make Good Economic Sense

Gerald A. Doeksen, PhD, and Deborah A. Miller, MS

*Primary health care in Oklahoma is important for the quality of life for over 40% of the state's population or 1.3 million residents who do not live in Oklahoma's metropolitan statistical areas. This state has undertaken to provide health care facilities and manpower to meet the needs of its rural population. A physician establishing a practice in a rural community not only improves the level of health care, but likewise improves the economic viability of the community. This paper, with the use of a computerized community model, will illustrate how a one-physician practice in a rural Oklahoma community generates 17.8 jobs and \$343,706 worth of income. Rural physician practices are vital to the economic health of small Oklahoma communities.*

There is little doubt that the health care industry in rural Oklahoma provides jobs, especially in those communities where a local or regional hospital is located. The economic impact of this industry is large indeed, as illustrated by the fact that non-government rural hospitals outside the Tulsa and Oklahoma City areas employ an estimated 15,000 full-time equivalent (FTE) employees and pay over \$250 million in wages.<sup>1</sup> Added to this are the numbers of jobs created by supporting medical services such as pharmacies, community health centers, nursing homes, departments of health, and other

health care agencies. Included in the health care system for rural residents is the private practice physician who is prevalent in smaller Oklahoma communities.

A physician practice generates a sizable flow of money throughout a local economy. To illustrate the amount of money involved in a private practice, a study of 25 rural Oklahoma physicians completed in 1986 was utilized.<sup>2</sup> Data collected included such items as office visits, emergency room visits, and hospital visits for the past year by month; all capital costs involved in the practice; and all operating costs for the practice for the past year. Ten of the physicians had been in practice less than two years, whereas the other 15 had established practices. Capital investment of a solo physician includes \$97,500 for a building, \$11,000 for land and parking lot, and \$25,762 for medical equipment. Thus, total capital investment in a solo practice is \$134,262.

Since funds are often borrowed to finance the capital items, it is useful to develop an annual capital operating budget. If the building, land, and parking lot are financed for 20 years at 10%, then annual principal and interest payments will be \$12,744. Likewise, if the equipment is financed for 10 years at 13%, total annual principal and interest payments will be \$4,747. Total annual principal and interest payments for all capital costs is estimated to be \$17,491 (Table 1). Operating costs include building, office, medical, and labor. Operating costs for labor are estimated to be \$27,862 and include a medical assistant and a bookkeeper/receptionist.

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**Table 1. Annual Expenses and Revenue for a Solo Physician Practice<sup>2</sup>**

<b>Expenses</b>	
Capital costs	
Land and building	\$12,744
Equipment	\$ 4,747
Total annual capital costs	\$17,491
<b>Operating Costs</b>	
Building	\$ 6,868
Office	\$15,194
Medical	\$19,363
Labor	\$27,862
Total annual operating costs	\$69,287
Total annual costs	\$86,778
<b>Revenue</b>	
Gross income	
100% collections	\$152,895
95% collections	\$145,250
90% collections	\$137,605

**Table 2. Summary of Annual Projections Provided by the Community Simulation Model**

Category	Model Output
Economic	Employment by industry sector
	Income by industry sector
	Output by industry sector
Demographic	Population by age-sex cohort
	Population for community and service area
Service	Hospital bed days by age-sex cohort
	Physician visits by age-sex cohort
	Ambulance calls
	Number of fires
	Water requirements
	Sewer volume
	Solid waste volume
Revenue	Community revenue by source

The physician is assumed to have 4,600 annual office visits and charge average rates. The average charge for an office visit is \$23.80; for a routine office visit, \$19.30; for a hospital visit, \$27.70; and for an emergency room visit, \$35.90. Gross revenue from a solo practice is projected to equal \$152,895. With a 90% collection rate, gross revenue, or the amount the patients would pay, will equal \$137,605. This information provides important elements that are used in the community model.

## THE MODEL

The community model was originally developed in Oklahoma and has been used by community development professionals in Oklahoma and Texas. The model is designed to be easily adapted to a wide range of community applications. Specific information on the community is requested for population variables, employment data, and geographic location. These data are readily available from census publications and state employment agency reports. The computer model, which resides on an IBM 3081 K computer in Oklahoma State University's Department of Agricultural Economics, is interactive and asks a series of questions to which the user responds by providing the data required. Data in Table 2 provide a summary of the information provided by the model.

In a physical science field, a test tube can be used to conduct experiments. In a social science field, the computer becomes the test tube. The economy of a community, via a model, is put into the computer, and changes are imposed to measure the impact of

variables. The model includes all income and employment interactions that occur. For example, if a physician hires a medical assistant, the model not only measures the flow of funds from the physician to the medical assistant, but also traces the spending pattern of the medical assistant, and each time the funds are spent thereafter. A good analogy is a pebble being thrown into a pond. The initial ripple is the initial flow of funds, and each successive ripple traces those dollars as they flow from one activity to another. The model measures the initial spending impact and all ripples, or secondary impacts. A detailed presentation of the model can be found in Appendix A and in *Simulation Model for Communities in Oklahoma*.<sup>3</sup> The complete model has over 200 equations describing the economic and social relations within a community. The community model is made dynamic through the use of equations that predict final demand over time.

To measure the impact of a physician or physicians on the economy of a community, the model is run with the physician or physicians in practice. This run is the "as is" case and is called the baseline run. The second computer run assumes the physician or physicians are not practicing in the community and is called the impact run. The difference between the two runs measures the impact of the physician or physicians on the community's economy. The model measures all changes in the economy. Some of these are changes in income, employment, retail sales, and taxes.

A relatively isolated Oklahoma community was selected for analysis. According to the Oklahoma

Table 3. Employment and Income Effects of Physicians in a Rural Community

Item	Physicians and Workers in Office	Total Community Effect	Multiplier
Employment	15.2	57	3.75
Income	\$365,471	\$1,099,860	3.00
Retail sales		\$ 822,000	
Sales tax		\$ 24,660	

Employment Security Commission, the population of this community is estimated to be 5,000.<sup>4</sup> Employment data by place of work for the county give some idea of the economic base of the area. There were 10,000 jobs in 1984. Of these, 1,200 were farm proprietors, and 400 were wage and salary farm workers. Another large category is 2,500 jobs in the mining sector, oil, and gas.<sup>5</sup> The remaining jobs primarily serve the basic agricultural and mining sectors.

Four physicians have private practices in this community. Two of the physicians do not have full-time practices; thus it is estimated that there are 3.2 FTE physicians. To complete the impact run, it was assumed that the expenditures by consumers for physician services and in turn, the expenditures by the physicians, would not occur in this community. No assumptions were made about the impact on pharmacy services or on the hospital. The assumption was that the residents would not pay \$625,126, which is the estimated gross revenue of the physicians at a 90% collection rate. Data provided by the local physicians and from Table 1 were used to arrive at this estimate. If the physicians were not located in the community, the expenditures as discussed in Table 1 would not occur. With these assumptions, the model was run.

## RESULTS

The changes in employment and income are depicted in Table 3. The four physicians (3.2 FTEs) are assumed to employ an average of three people in each practice. Thus, their employment, which includes the physicians, creates 15.2 direct jobs. The impact of these jobs throughout the economy, as money is spent in other businesses, results in a total of 57 jobs including the original 15.2. This figure is obtained by subtracting the total employment of the impact run from the total employment of the baseline run. In economics, a multiplier is used to measure total economic activity and is derived by dividing total employment by direct employment. The physician employment multiplier is 57 divided by 15.2 (FTE

physicians plus employees), or 3.75. This means that for each job created directly (the physician and his employees), a total of 3.75 jobs are created throughout this economy. If the multiplier is completed on a physician basis, each physician creates 17.8 jobs throughout the economy.

The amount of wages paid by the physicians and earned by the physicians is estimated at \$365,471. As this turns over through the economy it increases to a total of \$1,099,860. Again, this is the difference between the two computer runs. The income multiplier is 3.00, which means that for each one dollar of income generated directly, a total of three dollars is generated throughout the community's economy. A portion of the income is not spent in the community, eg, income tax, stocks, bonds, etc. Total income generated throughout the community is \$343,706 per physician (\$1,099,860 divided by 3.2 physicians).

Another indicator of the economic importance of the physicians in this community is the impact on retail sales. The model estimates that the physicians' presence generates \$822,000 in retail sales and \$24,660 in sales tax (assumes 3% rate) to this town.

## SUMMARY

The presence of physicians in rural communities adds a quality of life that is vital. The economic impact of a physician on a small community is often overlooked but it is also very important. Considering the current financial difficulties of many rural hospitals, it is imperative that health care facilities and smaller communities be able to attract physicians for their medical as well as economic well-being.

This study estimates that a physician in a rural town in Oklahoma generates 17.8 jobs and \$343,706 worth of income. The presence of each physician also generates \$256,875 in retail sales and \$7,706 worth of community sales tax. The model does not deal with the amount of state income tax generated by a physician but that amount is also significant.

Many articles have dealt with the need to retain physicians in rural areas, as well as with the appropriate ratio of physicians to population. Through the Rural Medical Education Scholarship Program and physician placement programs, young physicians completing their programs are encouraged to locate in rural communities where the medical need is greatest. Now it appears that there are good economic reasons for a rural community to have a physician. Perhaps additional programs for the placement and retention of physicians in rural sites, eg, tax waivers,

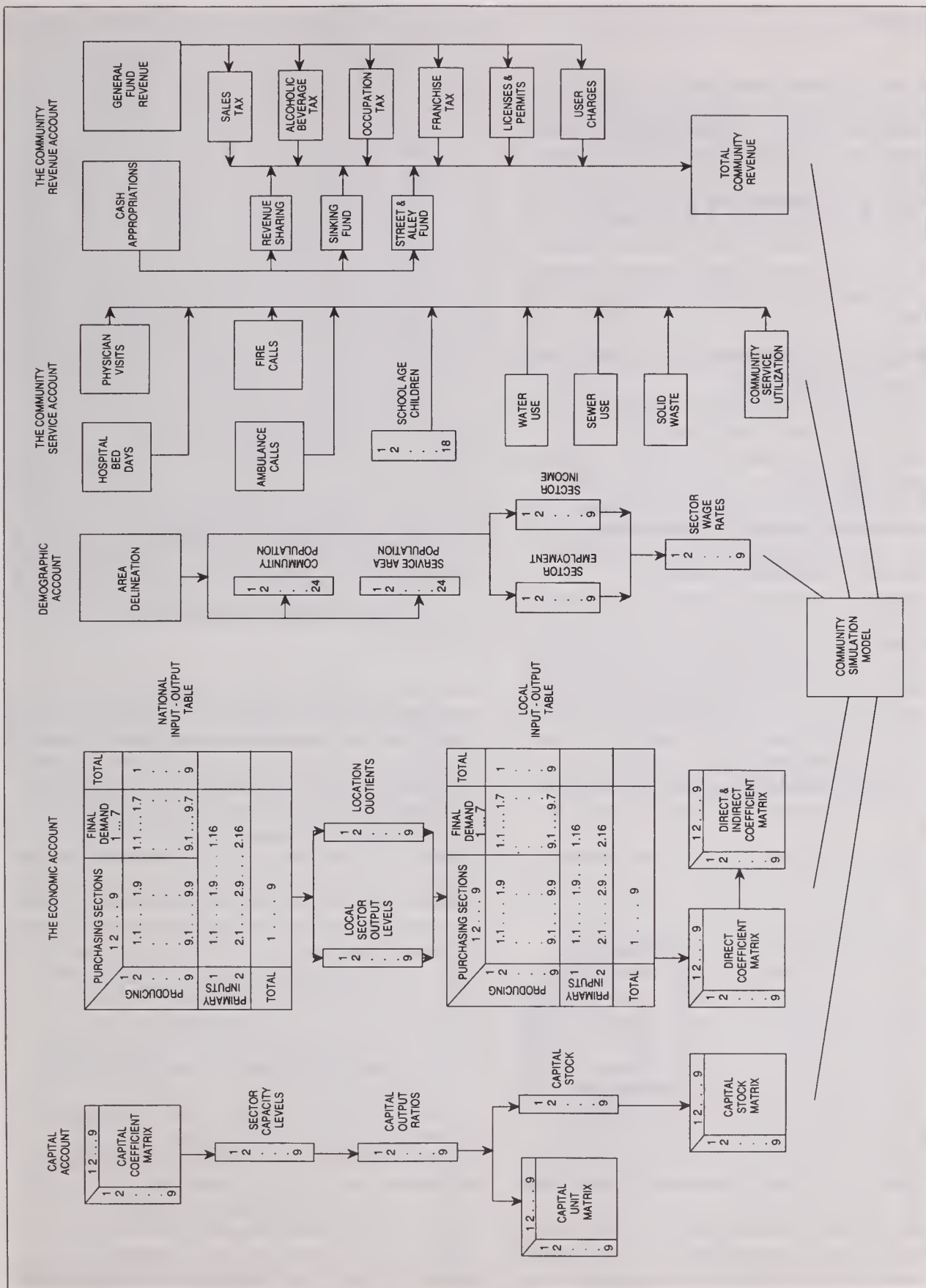


Figure 1. Overview of the Community Social Accounting System



incentives, or grants, should be considered. Some states have enacted such programs. When weighed against the gain in state tax dollars due to increased retail sales and employment, it just might make good economic sense as well. This could create a win-win situation: the physician wins by receiving financial assistance at the beginning of his/her practice, when it is needed the most; the community wins by receiving a higher level of health care and economic prosperity; and the state wins by adding to its tax revenues.

## APPENDIX A: SUMMARY OF COMMUNITY SIMULATION MODEL

The data necessary for the model are contained in several accounts. The accounts are then linked through a series of equations. Figure 1 presents an overview of the social accounts contained in the model. The model contains five accounts: an economic account, a capital account, a demographic account, and municipal accounts for community services and community revenue.

The economic portion of the model is the driving force. It includes a community specific input-output model and a gravity model. The gravity model is used to determine the service area of a community, based on population levels and distance to nearby communities. A location quotient technique is applied to a regional or state input-output model to derive a community-specific input-output model. The community model is made dynamic through the use of equations that predict final demand for a given period.

The capital account allows for the simulation of investment and its effects on the economy. Capital transactions by industry sectors are included in the capital coefficient matrix. Capacity levels and capital-output ratios describe the relationship between capital investment and industry output. The capital data are related to the inter-industry information included in the input-output model.

The demographic account contains information on community population. A gravity model (based on distance to other communities and population) is utilized to estimate the community service area. A cohort survival sub-model predicts population by age-sex categories based on birth rates, death rates, and migration. Population information is stored for both the community and the service area.

The community service account contains usage coefficients for services provided in the community. Services analyzed include hospitals, clinics,

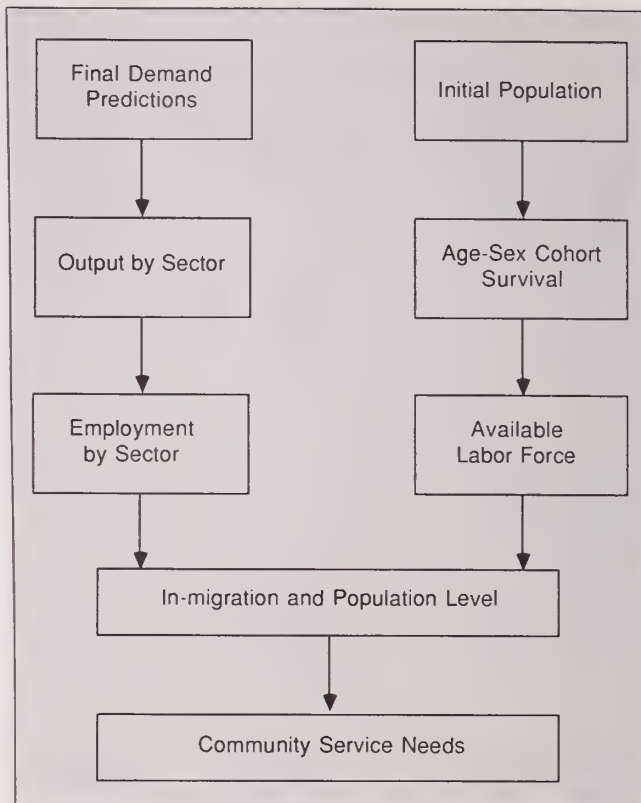


Figure 2. Overview of Major Computations in the Community Simulation Model

emergency medical services, fire protection, water, sewer, and solid waste. Community requirements for each of these services are estimated, based on model output. The community service information is based on research conducted for each service in Oklahoma. The revenue account provides projections of local revenue by sources such as sales taxes, licenses, permits, and user charges for various services. The revenue projections are based on community-specific revenue data available for Oklahoma communities.

Figure 2 presents an overview of major computations contained in the model. The economic account contains a local input-output model. Equations for each category (households, capital investment, inventory change, federal government, state and local government, and exports) predict final demand for a given period. Production relationships then determine output levels by economic sector. Labor productivity rates are used to estimate employment requirements by sector. At the same time, the demographic account is estimating population using an age-sex cohort survival technique. Using local labor force productivity rates, the available labor force is then estimated for each year. Net migration is the balancing variable to match employment needs with labor force. The resulting final population

values are then included in the next year's calculations.

A large secondary data base is included with the model to minimize data collection. Growth rates, input-output parameters, and community service coefficients are included in this data base. The computer model is interactive and asks a series of questions to which the user responds by providing the data required. The model is written in FORTRAN and compiled on an IBM 3081 K computer. At the time of development, the data base and equations required so much storage space that a mainframe computer was needed. However, given the rapid developments in the microcomputer field, conversion to a microcomputer may be possible in the future.



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# Infection Control Measures for Human Immunodeficiency Virus (HIV): Universal Precautions

Philip J. Rettig, MD

**T**raditionally, patients known or suspected to be infected with bloodborne pathogens such as hepatitis B virus or, more recently, human immunodeficiency virus (HIV) have been placed in a category of isolation called "Blood Precautions." Charts, doorways to patients' rooms, and specimen containers were labeled "blood precautions" or "biohazard," and hospital personnel were thus warned of the potential infectivity of these patients and their blood. Recently, however, new information about the epidemiology of HIV infection and the small, but existing, risk of workplace transmission of HIV to health-care workers has led to a national consensus on a new type of isolation: "Universal Precautions."

The development and utilization of serologic tests for antibody to HIV have demonstrated that the majority of HIV-infected Americans (perhaps one to one-and-a-half million persons) are asymptomatically infected. Many of these individuals are not identifiable as being at risk; their sexual preferences, patterns of sexual activities, prior medical histories, and social habits (including parenteral drug abuse) are not readily apparent. In 1986, 3% of critically ill patients seen in the emergency room at Johns Hopkins Hospital were seropositive for HIV. A follow-up study in 1987 found that 4% of 2,275 emergency patients were HIV-infected. Fifty of 92 asymptomatic HIV-infected patients had not been identified as

being at high risk of infection. In a study in Seattle, 1.1% of all blood or serum specimens *not* labeled as "biohazard" were positive for HIV antibody.

The prevalence of asymptomatic infection in Oklahomans presenting for medical care is almost certainly lower than in these high-risk areas, but such individuals clearly are seen throughout the state and cannot be readily identified as infected. Continued reliance on "blood precaution" labels for symptomatic individuals or patients judged (often erroneously) to be at risk identifies only a minority of all infected persons. Moreover, such labeling destroys confidentiality and exposes labeled patients to potential discrimination in schooling, housing, employment, social activities, and insurability.

A number of studies have now demonstrated that health-care workers sustaining percutaneous or mucous membrane exposure to HIV-infected blood (or other body fluids) are at risk of seroconversion at a rate of no more than 0.5% per exposure. Most of these infections have followed accidental needlesticks, although several occupational infections have occurred in individuals whose mucous membranes or nonintact skin were exposed to infected blood. Preventing percutaneous or mucosal exposures to infected blood is the mainstay of HIV infection control in health-care settings.

In light of these considerations, the Centers for

Disease Control (CDC), in August of 1987, published revised "Recommendations for Prevention of HIV Transmission in Health-Care Settings," which stated that "medical history and examination cannot reliably identify all patients infected with HIV or other bloodborne pathogens" and therefore "blood and body fluid precautions should be consistently used for *all* patients." "Universal precautions" should be used in the care of *all* patients, regardless of their clinical diagnosis or condition, without regard to known or perceived high-risk behaviors. Such precautions are the minimum isolation requirements for all patients. In certain circumstances, more stringent or specialized isolation techniques may be necessary for patients requiring respiratory, enteric, or strict isolation.

The CDC has recently (June 24, 1988) issued further clarifications of the required components of universal precautions. These guidelines specify that the following body fluids be considered potentially infectious:

- blood and blood components
- semen
- vaginal secretions
- cerebrospinal fluids
- body fluid: synovial, amniotic, pleural, peritoneal, pericardial
- patients' non-intact skin and mucous membranes

Universal precautions do not apply to feces, nasal secretions, sputum, saliva, sweat, tears, urine, or vomitus *unless* there is visible contamination with blood. Again, these guidelines address the risk of transmission of bloodborne infection with HIV or hepatitis B. Infections in these latter fluids may necessitate additional precautions. For example, patients with bacterial diarrhea who are incontinent of feces should be placed on enteric precautions. Strict isolation techniques may be appropriate for the intubated patient with extensive pneumonia due to methicillin-resistant *Staphylococcus aureus* or multiply-resistant *Pseudomonas aeruginosa*.

Anticipated exposure to the body fluids listed above does not mandate garbing of health-care workers in head-to-foot protective gear. Rather, a graded, rational use of barrier protection depending on the type and degree of exposure is indicated. Simple external examination of a patient or monitoring of routine vital signs requires only routine handwashing before and after patient contact. Gloves should be used when exposure of the hands to blood,

mucous membranes, or nonintact skin is anticipated. Routine phlebotomy does not necessarily call for universal use of gloves; gloves should be used if contamination of the hands with blood is considered likely, especially if the health-care worker has inflamed or otherwise nonintact skin. Gowns are indicated if soiling of clothing or skin with blood or other body fluids may occur. Masks and/or protective eyewear should be used when aerosolization or splashing of blood or blood-contaminated fluids is likely. None of these precautions decreases the need for careful handwashing between patient contacts or for safe disposal of used needles or other sharps. These two principles continue to be the cornerstones of effective infection control.

Implicit in the adoption of "Universal Precautions" is the understanding that patients, patients' charts, or patients' specimens will no longer be labeled with stickers proclaiming "Blood precautions" or "Biohazard." All patients are to be considered at risk of HIV and hepatitis B infection. Specific labeling of patients, or selective screening of certain categories of hospitalized persons, destroys the "universality" of universal precautions.

Adoption and implementation of these procedures promise to enhance the protection of health-care workers from bloodborne infections. Preliminary regulations for health-care employers issued by the Federal Occupational Safety and Health Administration mandate implementation for all health-care facilities. Careful, considerate adoption of these precautions should now become universal. □

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News from  
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## ***Campylobacter*: Etiologic Agent of Bacterial Enteritis**

The first widely read paper concerning the role of *Campylobacter* in human disease appeared in 1977. Since that time, this agent has earned a reputation as a major cause of bacterial enteritis in the United States.

*Campylobacter jejuni* causes the overwhelming majority of human campylobacteriosis. Generally, a symptomatic infection begins with a prodromal phase which involves one or two days of fever, headache, arthralgias, myalgias, and backache. Progression leads to diarrhea, abdominal pain, malaise, fever, nausea, and vomiting. The infection usually runs its course in a week's time, but up to

20% of cases have a longer and more serious illness.

Treatment consists of rehydration and electrolyte therapy, and a brief course of antimicrobial therapy may be given for those patients with prolonged or severe illness. Erythromycin is the drug of choice, but tetracyclines and aminoglycosides are also used.

Transmission of *C jejuni* is by the fecal-oral route, through contaminated food and water, or by direct contact with fecal material from infected animals or persons. The most common vehicles have been untreated water, unpasteurized milk, and improperly cooked food, including poultry products.

*Campylobacter* infections have been reportable in Oklahoma since July 1983. The number of reported cases peaked in 1985 at 298, and decreased slightly to 258 in 1986, and 250 in 1987. Onset of illness is most frequently reported between May and August. Case rate by age is highest among those less than one year of age.

Prevention of *Campylobacter* infections depends on public awareness of the importance of proper hygiene, proper cooking and storage of foods, and consuming only pasteurized milk and treated water. Additional information on this communicable disease or others can be obtained by calling the General Communicable Disease Division, 405/271-4060. □

DISEASE	June 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	4	5
CAMPYLOBACTER INFECTIONS	30	77	105	109
ENCEPHALITIS, INFECTIOUS	0	4	12	12
GIARDIA INFECTIONS	18	69	79	90
GONORRHEA (Use ODH Form 228)	663	3571	4902	6225
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	19	105	104	101
HEPATITIS A	28	245	156	205
HEPATITIS B	19	86	137	111
HEPATITIS, NON-A NON-B	5	23	25	27
HEPATITIS UNSPECIFIED	2	18	17	47
MEASLES (RUBEOLA)	0	8	2	4
MENINGITIS, ASEPTIC	3	18	53	50
MENINGITIS, BACTERIAL				
(non-meningococcal, non H. Influenzae)	2	8	24	32
MENINGOCOCCAL INFECTIONS	5	12	19	19
PERTUSSIS	0	24	42	94
RABIES (Animal)	4	22	19	52
ROCKY MOUNTAIN SPOTTED FEVER	18	32	38	55
RUBELLA	0	1	0	1
SALMONELLA INFECTIONS	57	135	166	178
SHIGELLA INFECTIONS	16	61	86	86
SYPHILIS (Use ODH Form 228)	10	85	82	94
TETANUS	0	0	1	1
TUBERCULOSIS	18	103	120	123
TULAREMIA	2	8	6	9
TYPHOID FEVER	0	0	2	3

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	65
BRUCELLOSIS	1
LEGIONNAIRES DISEASE	5
MALARIA	7
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	4



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## Be prepared

# Anaphylaxis a liability risk, advises letter from PLICO

Anaphylaxis, while it occurs infrequently in the physician's office, can pose a significant liability risk, warns Ray V. McIntyre, MD, chairman of the Loss Prevention Committee of the Physicians Liability Insurance Company (PLICO).

In a recent PLICO mailing to insured physicians in Oklahoma, Dr McIntyre, who is also president of the Oklahoma State Medical Association, urged doctors to be prepared to administer prompt, coherent treatment for anaphylaxis.

If the physician's office practice includes treatments with a potential for anaphylactic reactions, Dr McIntyre said, materials and medications needed for proper treatment of those reactions should be kept on hand at all times. The office staff should be thoroughly trained in administering such treatment, he added.

Included with Dr McIntyre's letter was the following statement on the treatment of anaphylaxis, prepared by the Oklahoma Allergy Society:

### **Recommendations for Office Treatment of Anaphylaxis**

The Oklahoma Allergy Society recommends the following precautions be taken in the physicians' offices in which treatments are administered which may occasionally cause anaphylactic reactions.

1. Patients should be asked to remain for observation for an appropriate period of time after the treatment (usually 20 minutes after injections such as antibiotics, allergenic extracts, etc).
2. Trained personnel should be immediately available who can recognize anaphylactic reactions and initiate treatment, and who are trained in basic cardiopulmonary resuscitation.
3. The following equipment and medications should be available: (1) stethoscope and sphygmomanometer, (2) tourniquets, syringes, hypodermic needles and large-bore needles (14-gauge), (3) aqueous epinephrine HCl 1:1000, (4) equipment for

administering oxygen by inhalation, (5) equipment for administering intravenous fluids, (6) oral airway, (7) injectable diphenhydramine or similar antihistamine, (8) aminophylline for intravenous injection, (9) corticosteroids for intravenous injection, and (10) vasopressors. The proper use of these materials should provide effective initial treatment for acute systemic allergic reactions. The prompt recognition of systemic reactions and administration of epinephrine are the mainstays of therapy.

4. Rarely, invasive procedures such as direct laryngoscopy, direct current cardioversion (electrical countershock), tracheotomy, and intracardiac injection of drugs may be needed. It is not expected that such invasive procedures would be available in the physician's office. Usually the patient would require transportation to an emergency department for their utilization.

5. Physicians should also be aware that patients who are receiving beta-adrenergic blocking drugs, particularly in large doses, are likely not to respond to epinephrine as usual. However, the initial office treatment of anaphylaxis in such patients is unchanged. They may be more likely to require transportation to an emergency facility for treatment of refractory shock, bronchospasm or cardiac arrhythmia; this potential need should be anticipated and transportation called for early.

Adapted, in part, from "Position Statement: Personnel and Equipment to Treat Systemic Reactions Caused by Immunotherapy with Allergenic Extracts," Executive Committee, American Academy of Allergy and Immunology, *J Allergy Clin Immunol*, 77:271-271, 1986.



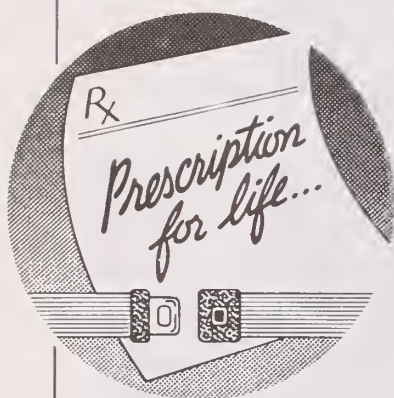
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## State physicians receive kits to promote use of seat belts

In an effort to promote seat belt use and education, the Oklahoma State Medical Association has entered into an agreement with the Oklahoma Highway Safety Office.

Last month, as part of the agreement, the OSMA distributed promotional kits to approximately 500 physicians across the state. The kits, which present seat belt use as a "prescription for life," contain posters, fact sheets, brochures, and lapel stickers.

The material is designed to appeal to young people because the association believes that often, when trying to reach parents, young patients are more effective than physicians.



The kits were mailed to pediatricians in Tulsa and Oklahoma City and to family and general practitioners in rural Oklahoma. Physicians have been asked to distribute the information to patient families — families with young members.

Evaluation forms were included with the kits; physicians are asked to complete the forms and return them to Claudia Kamas, OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118.

The OSMA has been involved in other activities promoting seat belt use and legislation. In April of this year, a "survivor's grove" of trees was begun on an acreage south of the Oklahoma Historical Society building in Oklahoma City. A total of 104 trees will be planted, each tree representing a life saved in 1987 through the use of seat belts. The grove will be dedicated in late November of this year, in conjunction with Thanksgiving, and the OSMA will provide a plaque bearing the names of those who have worked for seat belt legislation.



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Letter to state editors

McIntyre challenges Watson to name Medicaid abusers

In a letter to state newspaper editors last month, Oklahoma State Medical Association President Ray V. McIntyre, MD, criticized a statement made by DHS Director Phil Watson.

Watson's widely publicized remark about Oklahoma physicians abusing the Medicaid system was branded a "slur" by Dr McIntyre, who demanded Watson produce the evidence supporting his statement.

In his letter, Dr McIntyre promised the support of all Oklahoma physicians in prosecuting guilty parties named by Watson. The complete text of his letter follows:

Dear Editor:

Oklahoma Department of Human Services Director Phil Watson owes both the public and physicians the evidence to prove his recent allegation that there is widespread abuse of the Medicaid system by Oklahoma doctors.

This sweeping indictment of the medical profession slurs thousands of Oklahoma physicians who make the Medicaid program work.

Oklahoma physicians treat Medicaid patients because of their sense of compassion and social responsibility, not to get rich. Indeed, Medicaid reimbursement for physician service usually is less than half the actual cost.

Mr. Watson's slap in the face to Oklahoma physicians comes at a time when huge budget cuts at DHS will force doctors to provide even greater amounts of uncompensated care.

Fraud and criminal activities by physicians are inexcusable.

Additional directory correction brought to attention of OSMA

Inaccurate directory listings can result in inconvenience for both the callers and the recipients of the misplaced calls.

With that in mind, please note the following correction in your copy of the 1988-89 OSMA Medical Directory:

The correct telephone number for John Roane Pittman, MD, Oklahoma City, is 405-722-9474. The number listed in the directory is incorrect.

Mr. Watson, let us know who these doctors are and I assure you of the support of all Oklahoma physicians as you prosecute them to the fullest extent of the law.

In the meantime, I also assure you that Oklahoma physicians will continue to provide medical services to those less fortunate both through the Medicaid program and other forms of charitable care.

IN MEMORIAM

1987

Dan Cross Galloway, MD	July 12
Donald Owen Walker, MD	July 21
Cecil Reid Reinstein, MD	August 14
Alwin Marshal Clarkson, MD	September 1
Rex Elmer Kenyon, MD	September 16
Charles P. Bondurant, Jr., MD	October 12
James C. Smith, Jr., MD	December 30

1988

Charles Stewart Cunningham, MD	January 1
Charles Wallace Coyner, MD	January 4
Glen Franklin Wade, MD	January 12
Newman Sanford Matthews, MD	January 12
Frank Cornwell Lattimore, MD	January 30
Leo Lowbeer, MD	February 3
Joseph Norman Kramer, MD	February 16
Eugene Richard Flock, MD	February 17
Jay P. Irby, MD	February 25
James William Finch, MD	March 4
John Junior Donnell, MD	March 7
Tony Willard Pratt, MD	April 21
James Park Dewar, Jr., MD	May 5
Hugh Albert Stout, MD	May 7
James Robert Carroll, MD	May 28
Dean Crittenden Walker, MD	June 11
Vernon Dean Cushing, MD	June 19
William Claude McCurdy, Jr., MD	May 22
James Breese Darrough, MD	June 29
Paul Thurston Powell, MD	July 1
Jack Burgess Tolbert, MD	July 12

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## DEATHS

### James Breese Darrough, MD 1909 - 1988

Vinita native James B. Darrough, MD, died June 29, 1988, in Oklahoma City. Dr Darrough, who was graduated from the University of Oklahoma School of Medicine in 1933, established a general practice in Vinita after completing his residency there. He was an officer with the US Army Medical Corps during World War II, serving overseas for eight months. A Life Member of the OSMA, Dr Darrough closed his medical practice in 1980.


### William Claude McCurdy, Jr., MD 1910 - 1988

OSMA Life Member William C. McCurdy, Jr., MD, died May 22, 1988, in his hometown of Purcell. A 1936 graduate of Tulane University School of Medicine, Dr McCurdy returned to Purcell in 1939 to join his father in a general practice. He retired in 1986, having served as a preceptor for the University of Oklahoma since 1946 and as a longtime member of the Admissions Board for the OU College of Medicine.

### Paul Thurston Powell, MD 1914 - 1988

Paul T. Powell, MD, retired Ponca City family physician, died July 1, 1988. A Life Member of the OSMA, Dr Powell was born in Milburn, Okla. He was graduated from the University of Oklahoma School of Medicine in 1941 and during World War II served with the US Army Medical Corps as a health officer in McAlester. He became director of the Kay County Health Department shortly after the war.

### Jack Burgess Tolbert, MD 1919 - 1988

General practitioner Jack B. Tolbert, MD, of Mountain View, died July 12, 1988. Born in Pryor, Okla, Dr Tolbert was graduated from the University of Oklahoma School of Medicine in 1943 and served an internship in Portland, Ore. He was on active duty with the US Army Medical Corps for 24 months during World War II before establishing his practice in Mountain View in 1947. He later became an associate preceptor at his alma mater. 

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## REACTION TIME

### OMPAC revs up for fall elections as trial lawyers' exec worries

*To the Editor:* Following the 1986 elections, Larry L. Long, MD, chairman of the Oklahoma Medical Political Action Committee, reported that OMPAC had an extremely successful year. With the OSMA's support, OMPAC was able to defeat a number of key trial lawyers who opposed us in our quest for tort reform.

That success was noted recently by Tony Borthick, executive director of the Oklahoma Trial Lawyers Association, in the OTLA journal, *The Advocate*. Borthick acknowledges in an editorial that OTLA had losses in "several key Senate districts" in 1986 and warns, "That situation cannot be repeated in 1988." He adds, "Should one or two members who

have supported OTLA strongly in the past be defeated, it would be impossible to fight off the continued attacks of the 'tort reform' coalition."

On behalf of the entire OMPAC Board of Directors, I would like to ask your support of OMPAC. We can repeat our success in 1988, with the support of every physician and auxilian.

We need your help. Please mail your support on a personal check to OMPAC, P.O. Box 54520, Oklahoma City, OK 73154.

—Robert W. Baker III  
Director/Treasurer  
OMPAC

### Ugly label and medical kitsch disturb Oklahoma City doctor

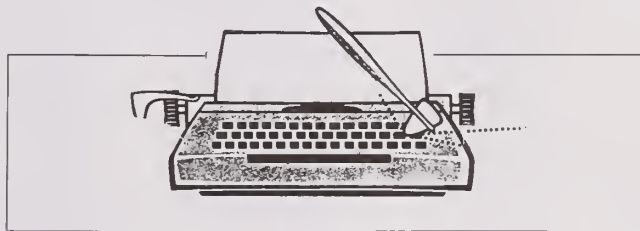
*To the Editor:* After reading your article, "Profile of Oklahoma Allopathic Physicians,"<sup>1</sup> I did something I haven't done in years. I went to the wall where my diplomas have been gathering dust and read them all. I was reassured. On every one, either spelled out or abbreviated, I was identified as a medical doctor. To my relief, no one called me an allopath. As usual, the impulse to complain in writing didn't last long and all that remained was the sensitized state. However, my reaction to being labeled an allopath in a more recent article on physician supply<sup>2</sup> was beyond repression.

What first disturbed me about these articles on physician supply was finding myself classified as an allopath. I object to the classification. *Allopath* is an ugly word. It evokes the image of something that should be removed from the streets, or incarcerated, or taken to a rapid treatment center.

Historically, *allopath* has derogated rather than described a medical doctor. The word was coined by Hahnemann to distinguish and disparage systems of medicine other than his own (Webster's 2nd Ed). Hahnemann, a nineteenth century self-styled homeopath, believed that diseases were treatable by those drugs which produced effects on the body similar to the symptoms of the disease. He then claimed that allopathy was a system of medical practice that aimed to combat disease by the use of remedies producing effects different than those produced by the disease treated. No wonder my nineteenth edition (1943) of *Dorland's Medical*

*Dictionary* stated that an "allopath is an incorrect designation for a regular practitioner."

More disturbing than being referred to as an allopath rather than a medical doctor was the realization that these articles were classic medical kitsch. (Originally, kitsch was a profound form of denial.)<sup>3</sup> Now, here are two studies about the future of physicians, almost 95% of whom are medical doctors, and the words *medical doctor* have been avoided. It is a study about physicians, a profession dedicated to treating disease and preventing death. Yet *disease* and *death* are words nowhere to be found. Instead,



the authors have written about health care facilities,<sup>1</sup> health and the physician, health professionals, health plans, health maintenance organizations (HMO), and the latest concoction, catastrophic health insurance.<sup>2</sup>

The authors have joined the Grand March.<sup>3</sup> Up with health! Down with medical doctors and their diseases. Forget about defining health, or that health for the physician is defined in terms of disease.

(continued on next page)



## Reaction Time *(continued)*

Health can stand for that good feeling everyone wants and deserves, and it can be seen, if not defined, continuously on television. Health undefined was the cry of the day when the egalitarian frenzy overwhelmed academic medicine, making today's kitsch inevitable. Colleges of medicine were transformed into a contemporary abstraction — the Health Science Center. The elitist striving medical doctor was leveled and swept away, to be replaced as rapidly as possible with figureheads for the health-industrial complex and their brokers, the insurance industry.

The insurance industry has led the way for the entrepreneurial exploitation of the health kitsch. Life insurance was a better slogan and a better sell than death insurance; the same held for health rather than sickness or accident insurance. But what has been claimed in the name of advertising by the entrepreneurs has become insidious propaganda when disseminated by the state. The federal government, in league with the health-industrial complex and the insurance industry, has given special dispen-

sation to these entrepreneurs, exempting them from the customary truth-in-advertising requirements; for what they say is part of the propaganda. The state has demanded more honesty from toothpaste manufacturers about the prevention of dental caries than it does from health promoters.

The health maintenance organization is a flagrant example of this kind of partnership. Specifically, what does an HMO maintain? The proponents of HMO have conveniently lost sight of the fact that all HMOs have convincingly demonstrated is their ability to maintain their own organizations, and they can't do that very well without federal aid. How can health be maintained when it hasn't been defined?

Most disturbing of all is kitsch in action. Health, disease, economics, therapy, all get lumped together and lose what definition they have, exempting all or parts of the lump from scientific inquiry. Preposterous statements arise, like HMOs provide "little or no useless care" or "prepaid group practices can be presumed to provide little, if any useless care,"

*(continued on next page)*



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## BOOK SHOP

**Virus Infections of the Gastrointestinal Tract.** Edited by David A. J. Tyrrell and Albert Z. Zapikian. New York: Marcel Dekker, 1982, pp 486, price not given.

Diarrheal diseases have a striking worldwide impact. Recently it was estimated that in Asia, Africa, and Latin America, during a one-year period, there would be three to five billion cases of diarrhea and five to ten million related deaths. Diarrhea is also an important problem in developed countries. In a comprehensive survey of families, infectious gastroenteritis was the second most common disease experience, accounting for 16% of all illnesses.

In spite of the importance of the problem, attempts to identify the etiologic agents of a large proportion of diarrheal illnesses were unsuccessful prior to the 1970s. Major attempts to find such agents were made in the 1940s and 1950s, when volunteer studies in both the United States and Japan established that filterable agents occurring in gastroenteritis outbreaks could induce diarrhea in volunteers, but in spite of this finding, attempts to culture or identify the filterable agents were uniformly unsuccessful. This lack of success was keenly disappointing to virologists who, in recent years, were discovering many new viruses by means of the newly developed tissue culture systems. Although many of these viruses were shed in the stool, not one proved to be the long-sought virus(es) of acute gastroenteritis.

However, in the 1970s, two new groups of viruses were proved to be associated with human gastroenteritis. One was the Norwalk virus and the other was the rotavirus, which in 1972 and 1973 respectively were found to be etiologic in gastroenteritis of infants and children. Since the first reports of viruses associated with human gastroenteritis in the early 1970s, there has been a virtual explosion of information about agents associated with this disorder. This book, then, attempts to gather in a single source the



available information on this important subject. It presents a description of the field of viral gastroenteritis from an etiologic, epidemiologic, and physiologic perspective.

The book is primarily for those who have been following this enormous accumulation of knowledge about gastroenteritis which has occurred over the past fifteen or so years. Its emphasis is primarily on laboratory aspects, but interested clinicians will find

(continued on next page)

## Reaction Time (continued)

because all their economic incentives run to the contrary."<sup>2</sup> Even the citation to support this statement won't support it.<sup>4</sup> Taken to the extreme, this kind of muddled medical thinking becomes dangerous. Kitsch could kill.

To top it off, together the government and the health entrepreneurs have devised a system of medical care that has made hucksters of us all. Germany has given us the word *kitsch* and Germany has also given us *National Health*, a very popular term in that country during the thirties. Today, as medical care gets more distanced from disease, medical doctors, and definition, the handwriting on the wall has grown larger. For some, there will be comfort to find that in 1781, Thomas Jefferson, in *Notes on the State of Virginia*, wrote, "were the government to prescribe medicine and diet, our bodies would be in such keeping as our souls are now."<sup>5</sup>

Students looking ahead for jobs will be encouraged by Schwartz's conclusions that jobs will be available in the year 2000.<sup>2</sup> Students who want to devote their lives to the profession of medicine could be bewildered. For myself, I look forward to the practice of medicine in the year 2000 and to reading the journals. I just don't want to address letters to an Oklahoma or to a *New England Journal of Health and Allopathy*.

—Samuel Sepkowitz, MD  
Oklahoma City

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## Book Shop (continued)

much of interest. The contributors have all worked actively in the field, and their respective chapters reflect their particular knowledge and interest.

The scope of the book is broadened by inclusion of chapters dealing with the immunology of the intestinal tract and on bacterial infection of the intestinal tract. There are also four chapters on virus-associated disease in animals which provide valuable parallels with human infections.

The chief criticism of this book ultimately relates to the progress in the field itself. Progress has been so rapid that certain parts of the book tend to be out-of-date. The most recent references in most of the chapters are from 1979. For example, neither adenoviruses nor caliciviruses are given as much importance as they would now merit.

The book is technically well produced and is quite readable. It is an important reference. It is hoped that the editors will soon update it.

—Harris D. Riley, Jr., MD  
Oklahoma City

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**Science Encounters the Indian, 1820–1880: The Early Years of American Ethnology.** By Robert E. Bieder, University of Oklahoma Press, 1986, pp 294, 12 illustrations, notes, bibliography, index, \$19.95 hardback.

In a review of this book, one might best start with the question: What made the American Indians the persons they were?

In the five chapters of the book, the author proceeds to answer this question by reviewing the works, writings, and opinions of five men who could be considered authorities on this question, along with that of the contemporary colleagues of each of the five. Each of these writers approached his contribution from a different point of view. The Indian was discussed from the viewpoint of the archeologist, ethnologist, phrenologist, and other scientists.

In his Introduction, the author tells the story of five men who were asked to describe an elephant. Each of these men was partly correct, but all five were in some ways wrong. The material in this book is a lot like that. Each of the five authorities on the period 1820 to 1880 no doubt had some accuracies and some inaccuracies. There was much agreement among them and often much disagreement; this supports the belief that there must have been a lot of theorizing and speculation by each of these writers. For instance, some insisted on the monogenist origin of all mankind, while others adhered to the polygenist theory. Some defended the theory that the Indians ascended from the stage of savagery to barbarism to civilized societies. Others described how some Indians descended from a high degree of civilization downward through barbarism to savagery. Some maintained that the only way the Indians could be civilized was by miscegenation, ie, by cross-breeding the white man's blood into the Indian races. Thus runs the general tenor of the book.

The author obviously did a tremendous amount of scholarly researching of the material for this production, as evidenced by the numerous footnotes and a lengthy bibliography.

For one who has an interest in the long history of the American Indians, their origin, culture, habits, life-styles, myths, religious practices, inter-tribal relations, and interracial associations, etc, this book will be of great and genuine interest; I would highly recommend it as an excellent piece of writing, scholarly produced, and one that will serve this purpose well.

—Luke L. Ellenburg, Sr., MD  
Greeneville, Tenn



**Money in the Ground: Oil and Gas Investments Explained.** By John Orban III, 2nd Edition. Oklahoma City: Meridian Press, 1987, paperback, pp 216, illus, \$27.95.

"A valuable commodity to some — a strategic material to others, petroleum is society's primary source of energy." This is the second edition of a very usable book. The idea for it came as a suggestion from the president of an overseas oil company, who recommended that a book "explain oil and gas investments for people from different backgrounds, who speak different languages." This small book does this well. It includes much more than the science of geology. It is written by a geologist especially for the layman who does not understand the oil business and knows little about it, but who would still like to invest in it. It is easily understood and reasonable. The text is enhanced by drawings and meaningful charts. The author, who has been employed in all aspects of the oil business, discusses limited partnerships, oil and gas programs for the investor, and alternatives as well as the future of the oil business. This second edition is also updated to reflect changes in the tax code promulgated in the Tax Reform Act of 1986. A particularly valuable feature of the book is the glossary of words and terms peculiar to the oil business.

Those interested in the petroleum industry will find this small book very useful.

—Harris D. Riley, Jr., MD  
Oklahoma City

**Stanley Cobb: A Builder of the Modern Neurosciences.** By Benjamin V. White. Boston: Francis A. Countway Library of Medicine; Charlottesville: University Press of Virginia, distributor, 1984, illus, pp 445, \$29.50.

The author, a gastroenterologist who was one of Cobb's students and later a colleague, has written an excellent biography of this academician. Stanley Cobb, a leading neurologist and neuropathologist, changed to psychiatry in the mid-portion of his career and completed his career as both a staunch proponent of environmental conservation and a comparative anatomist. Interspersed were his activities in and contributions to ornithology.

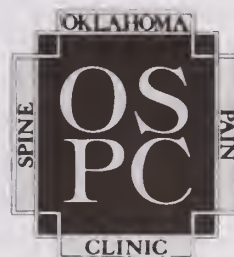
Stanley Cobb was born in Boston in 1887 of a well-connected Boston family. He attended Harvard Medical School. During vacations as a student he traveled to many locations throughout North America to study bird life; his findings were pub-

lished in various ornithological journals. After extensive training in this country in neurosurgery, neuropsychiatry, and neuroanatomy, he returned to Boston and was placed in charge of the neurological unit at Boston City Hospital. Here his research was concerned primarily with epileptic seizures and the possible relationship to decreased blood flow. Here he also began his long career of influencing those associated with him.

In the 1930s he shifted his career. He became interested in psychiatry and completed personal psychoanalysis. He then moved to the directorship of the psychiatric unit at Massachusetts General Hospital. Despite his official connection with the psychiatric department, he continued to teach the neuropathology course at Harvard Medical School. Cobb's involvement in neurology and general medicine contributed to the acceptance of psychiatric beds within a general hospital.

Upon retirement in 1954, Cobb undertook a research program which featured the correlation of his interests in ornithology, neuroanatomy, and behavior.

(continued on next page)



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Emerging from the account is a revealing portrait of Dr Cobb as well as an interesting view of academic medicine, especially the period between World Wars I and II. The book is enhanced by numerous photographs of Cobb's interesting work, his house officers, and his associates. Dr Cobb was severely disabled by arthritis and, during the final years of his life, was almost blind. Despite this he made some of his best known contributions, namely those to environmental conservation.

This is an attractive, readable book which will be of particular interest to those interested in the history of the neurosciences.

—Harris D. Riley, Jr., MD  
Oklahoma City

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**Goodman and Gilman's the Pharmacological Basis of Therapeutics.** Edited by Alfred G. Gilman, Lewis S. Goodman, Theodore W. Rall, and Ferid Morad. Ed. 7, New York: Macmillan Co., 1985, \$65.00.

This is the seventh edition of this classic textbook, and it is dedicated to the memory of Alfred Gilman. The first edition appeared 45 years ago, was written by Gilman and Goodman, and rapidly became the standard in the field. It has remained in that position.

The general organization of this edition is similar to the last one. It has, however, been substantially updated, but without an increase in the total page count. The book is divided into 17 sections which include discussions of general principles, the various categories of drugs, and toxicology. The useful appendices covering prescription writing, pharmacokinetic data, and drug interactions remain, and some have been expanded. The high quality of writing found in other editions continues.

This edition maintains the high standards of the previous ones and is recommended not only to medical students but to physicians in all fields.

—Harris D. Riley, Jr., MD  
Oklahoma City

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**The General: MacArthur and the Man He Called "Doc."** By Roger Olaf Egeberg. New York: Hippocrene Books, 1984, pp 242, illus, \$12.95.

The story of this book is contained in its title. Roger O. Egeberg, MD, relates to us the interesting story of his two years (1944 and 1945) as personal

physician and, subsequently, aide, friend, and confidant, to General Douglas MacArthur, one of this nation's most illustrious military figures. He tells about their relationship in the context of the campaigns in which the general commanded American troops in the Pacific theater. These include the campaigns from Australia, through the New Guinea jungles and highlands; the return to the Philippines and to Bataan; and the occupation of Japan. Egeberg first planned to write this book on his return from Japan; the press of other matters prevented him from doing so until recently.

Egeberg left the practice of medicine in Cleveland, Ohio, to serve in the army with the Fourth General Hospital in January 1942. He was first sent to Australia and then, in 1943, to Milne Bay, New Guinea. Here he had a head-to-head encounter with military bureaucracy and, following this, was asked by General MacArthur to be his physician. He then takes us step by step through the campaigns but, more importantly, paints a personal picture of General MacArthur. Those who have regarded MacArthur as a pompous, domineering military man will receive a new image. Egeberg gives us a sympathetic picture of General MacArthur as he goes about his daily duties, including the high regard which MacArthur's staff had for him; he emphasizes the general's fair-minded approach to dealing with the defeated Japanese.

Since the end of World War II, Dr Egeberg has served in a variety of important positions. He has been dean of the School of Medicine of the University of Southern California, assistant secretary for Health and Scientific Affairs of the US Department of Health and Welfare for a two-year period, and special consultant to the President on health affairs for several years.

He has given us an interesting and different account of General MacArthur.

—Harris D. Riley, Jr., MD  
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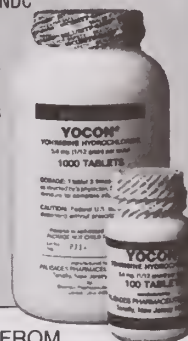
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### References:

1. A. Morales et al., New England Journal of Medicine: 1221. November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27-2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

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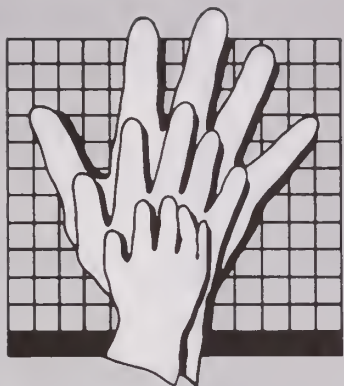
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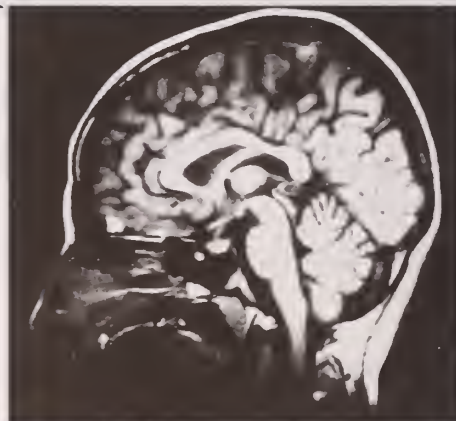
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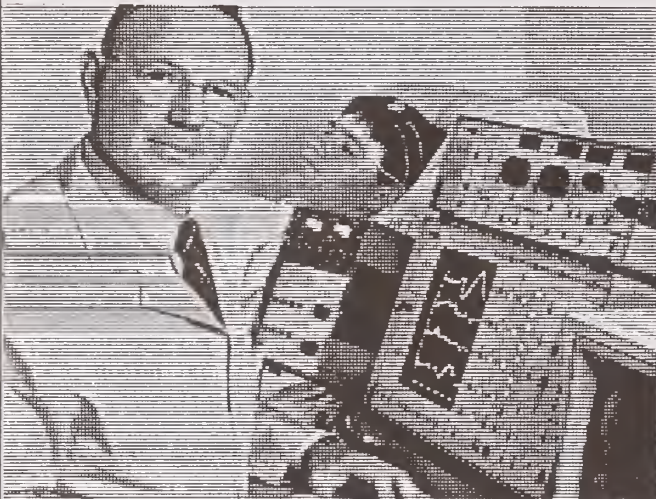
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Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

## AUXILIARY

# Physician Partnerships

Today's Reality...

Tomorrow's Challenge.



### Physician Partners,

Your auxiliary, the Oklahoma State Medical Association Auxiliary, is ready with great anticipation and excitement to accept this year's challenge.

Medicine is an ever changing environment. The tradition of excellence in medicine is constantly being challenged by high technology, stressing moral and ethical issues, and by government regulation and interference.

It is today's reality that physicians and their spouse partners must become involved in the issues concerning health care. The challenge to be successful in these endeavors will be the future of medicine!

The auxiliary is the only organization in which physician spouses join together in a partnership. This partnership is committed to addressing the specific concerns and problems unique to the medical family.

There are several areas in which the auxiliary is very effective and can be extremely helpful to physician partners. These areas are:

**Legislation** — The reality of government regulation and interference may be distasteful to us; however, we can make a difference. There is strength in unity! Medicine Day at the Capitol with the OSMA and the success of the national, state, and county phone banks are proof. This election year it is our challenge to become very involved in the campaigns with our time and money. We must have knowledge of the candidates! Are they friends of medicine? How do they feel about government-controlled health care, tort reform, mandatory assignment, and other health issues? It is important to belong to AMPAC-OMPAC. Through these PACs our elected officials recognize that we are serious about keeping friends of medicine in office.

**Health Education** — The auxiliary will always promote health education through projects at the national, state, and county level. Oklahoma was recognized at the AMAA Annual Meeting this year for its outstanding AIDS education project — Town Talk and the AIDS poster contest. Joan Maguire (Raymond), Tulsa, gave an excellent presentation to the national delegation. Our focus this year will revolve around adolescent health. The death rate

among our youth has increased by 11% from twenty years ago. The challenge is to change today's reality of *our* adolescents' health. The OSMAA-Health Education Foundation awards the Anne Garrison Scholarship to an outstanding nursing student each year. It also will provide grants to counties and state for health education projects.

**Malpractice Trauma** — Malpractice is a serious threat. One out of six physicians in the State of Oklahoma will be sued this year. The OSMA and OSMAA are addressing the problem. A newly created Physicians Legal Action Support Committee will be available to physicians and families who are plagued by the trauma of litigation.

**AMA-ERF** — As government and other sources of funding dry up, the auxiliary support of the American Medical Association-Education Research Foundation is even more critical. Contributions to medical schools for research, and low-interest loans to deserving medical students are necessary. Medicine must continue to attract the brightest minds for the future of medical excellence.

**Membership** — Belonging to medical auxiliary offers many opportunities for personal development, peer support, gratification in helping others, fun, and friendship. The National Leadership Confluence in Chicago each year offers eight county presidents-elect the opportunity to enhance their leadership skills and to become more educated concerning important health issues. Oklahoma's state confluence offers this opportunity to all its members.

"Male or female, young or old, foreign born or native, traditional or career, every physician spouse deserves the opportunity to become a member of the auxiliary, but they can not join us unless they know about us, and they can not know about us unless we tell them" — Mary Strauss (Albert), AMAA president.

Please help us by encouraging your spouse to become a member of the auxiliary. We need every individual's involvement in this partnership. Physician Partners, we understand Today's Reality and accept Tomorrow's Challenge!

—Jan Storms  
President, OSMA Auxiliary



## THE LAST WORD

■ **O.W. Dehart, MD, Vinita, and Mark Allen Everett, MD,** Oklahoma City, received special recognition this summer at the awards banquet of the University of Oklahoma College of Medicine Alumni Association. Dr Dehart, a family practitioner and faculty member at OU Tulsa Medical College, was named Physician of the Year — Private Practice. Dr Everett, head of the college's Department of Dermatology in Oklahoma City, was named Physician of the Year — Academic Medicine. The two were selected by the association's executive board on the basis on their contributions, professionalism, and relationship with the medical community.

■ **The AIDS Division of the Oklahoma State Department of Health** is offering a one-hour program on AIDS to interested civic and community organizations. The program, which is free of charge, is presented to groups of 25 or more by an AIDS educator and consists of a slide presentation followed by a question-and-answer period. The slide presentation includes a chronology of the epidemic, current statistics, exploration of how HIV reproduces, and modes of transmission and prevention. The program is designed to answer questions about how people become infected and how they can protect themselves. It is appropriate for adolescents and adults. For information, call (405) 271-4636.

■ **Voluntary reports from doctors are the single most important source of information on serious and rare adverse drug reactions in patients, but a report in July's *Archives of Internal Medicine* indicates such problems may be substantially underreported.** Authors Audrey Smith Rogers, PhD, of the Johns Hopkins University School of Medicine, Baltimore, and colleagues surveyed 3,000 physicians to determine their knowledge of, attitudes toward, and involvement in the reporting system, run by the Food and Drug Administration. Of the 1,121 physicians responding, only 57% were aware of the system. While more than 400 respondents had detected an adverse drug reaction in their practices during the previous year, only 21 reported these events directly to the FDA (many did not consider such incidents serious enough to report). "The physicians appear to appreciate the safety issues involved in prescription drug use and view reporting as a professional obligation; however, the current reporting system is

considered inconvenient," the authors report. In an accompanying editorial, Stanley A. Edlavitch, PhD, of the University of Minnesota School of Public Health, Minneapolis, notes that adverse drug reaction reporting rates for US physicians are one-fourth to one-half of those of physicians in Denmark, Canada, and the United Kingdom. He makes several suggestions for improving these rates.

■ **In this important election year, the Oklahoma Medical Political Action Committee (OMPAC)** is seeking the political opinions and financial support of all Oklahoma physicians and friends of medicine. Your ideas and participation are vital to OMPAC's continuing success. Let the OMPAC Board of Directors know what you think about the candidates and races. Call OMPAC Director Robert W. Baker III, (405) 843-9571 or 1-800-522-9452. Or sent a personal check for \$200, \$100, or \$50 to OMPAC, P.O. Box 54520, Oklahoma City, OK 73154.

■ **"Current Trends in Occupational Medicine"** is the title of the annual fall meeting of the Oklahoma Occupational Medical Association. It will be held Thursday through Saturday, November 10-12, 1988, at the Marriott Hotel in Oklahoma City. The sessions will run from noon to 5 PM Thursday, from 8 AM to 5 PM Friday, and from 8 AM to noon Saturday. Applications for 16 hours of CME credit to AAFP, AOMA, ACGIH, and AOHN are pending. For further information, contact Robert M. Mahaffey, MD, OU Tulsa Medical College, 9912 E. 21st, Tulsa, OK 74129.

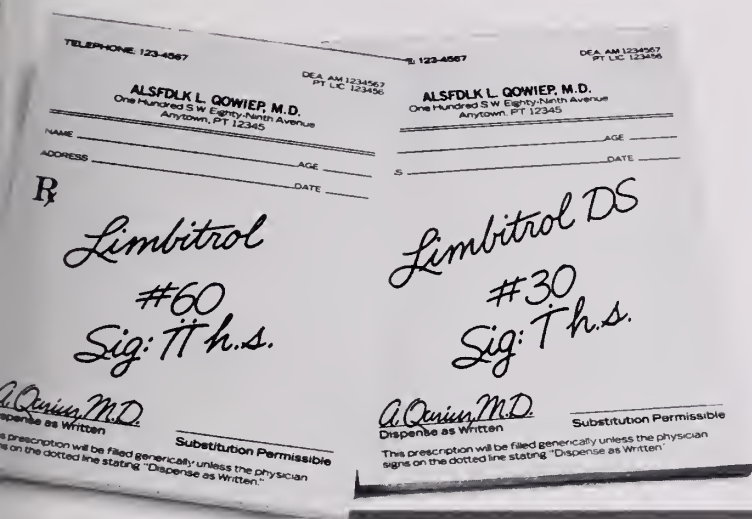
■ **A half-day conference on the basics of AIDS recognition and treatment** will be held October 15, 1988, at the Sheraton Norman Hotel, Norman, Okla. Among the speakers will be Ron Gilcher, MD, director of the Oklahoma Blood Institute; John Harkness, MD, assistant state epidemiologist and medical director of the AIDS Division, Oklahoma State Department of Health; and Jeffrey Beal, MD, associate clinical professor, Department of Internal Medicine and Family Practice, University of Oklahoma Tulsa Medical College. Registration for the 8 AM to noon meeting includes transportation to and from the OU vs. K-State football game in Norman that afternoon. For additional information call Claudia Kamas, (405) 843-9571 or 1-800-522-9452.





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- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose<sup>1</sup>
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- ➡ 50% greater improvement with Limbitrol in the first week than with amitriptyline alone<sup>2</sup>



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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al. *Psychopharmacology* 61:217-225, Mar 22, 1979.

### Limbitrol® Tranquilizer—Antidepressant

Before prescribing, please consult complete product information, a summary of which follows:

**Contraindications:** Known hypersensitivity to benzodiazepines or tricyclic antidepressants; concomitant use with MAOIs or within 14 days of monoamine oxidase inhibitors (then initiate cautiously, gradually increasing dosage until optimal response is achieved); during acute recovery phase following myocardial infarction.

**Warnings:** Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose® packages of 100; Prescription Paks of 50.



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In the depressed and anxious patient

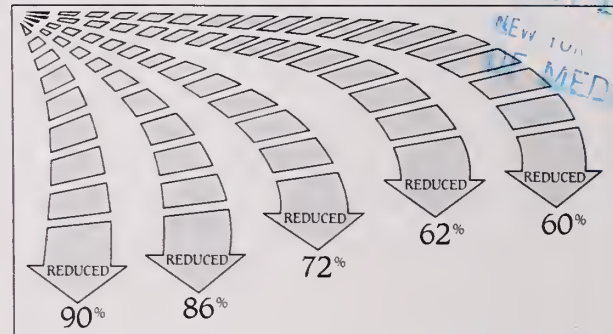
# See Improvement In The First Week...<sup>1</sup>

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose<sup>1</sup>
- ➡ First-week reduction in somatic symptoms<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy\*



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Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION

\*Patients often presented with more than one somatic symptom.

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# JOURNAL

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- For treatment of infections in the:
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- Convenient *B.I.D.* dosage – 250 mg, 500 mg and 750 mg tablets

\**In vitro* activity does not necessarily imply a correlation with *in vivo* results.

<sup>†</sup>Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

CIPRO® SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN.

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



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# Cipro<sup>®</sup> TABLETS (ciprofloxacin HCl/Miles)

■ 500 mg B.I.D. for most infections;  
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## BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION INDICATIONS AND USAGE

Cipro<sup>®</sup> is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below

**Lower Respiratory Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*

**Skin and Skin Structure Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*

**Bone and Joint Infections** caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*

**Urinary Tract Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*

**Infectious Diarrhea** caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*, and *Shigella sonnei*\* when antibacterial therapy is indicated

\*Efficacy for this organism in this organ system was studied in fewer than 10 infections

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro<sup>®</sup> may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

### CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

### WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

### PRECAUTIONS

#### General

As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

#### Drug Interactions

Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired; concurrent administration of these agents with ciprofloxacin should be avoided.

Probencid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

#### Information for Patients

Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness; therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

#### Carcinogenesis, Mutagenesis, Impairment of Fertility

Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below:

- Salmonella/Microsome Test (Negative)
- E. coli* DNA Repair Assay (Negative)
- Mouse Lymphoma Cell Forward Mutation Assay (Positive)
- Chinese Hamster V<sub>79</sub> Cell HGPRT Test (Negative)
- Syrian Hamster Embryo Cell Transformation Assay (Negative)
- Saccharomyces cerevisiae* Point Mutation Assay (Negative)
- Saccharomyces cerevisiae* Mitotic Crossover and Gene Conversion Assay (Negative)
- Rat Hepatocyte DNA Repair Assay (Positive)

Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results:

- Rat Hepatocyte DNA Repair Assay
- Micronucleus Test (Mice)
- Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

#### Pregnancy - Pregnancy Category C

Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced, and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in

## CONVENIENT B.I.D. DOSAGE

### Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg B.I.D.
Bone and Joint*	Mild/Moderate	500 mg B.I.D.
Skin/Skin Structure*	Severe/Complicated	750 mg B.I.D.
Urinary Tract*	Mild/Moderate	250 mg B.I.D.
	Severe/Complicated	500 mg B.I.D.
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg B.I.D.

pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

#### Nursing Mothers

It is not known whether ciprofloxacin is excreted in human milk, however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, a decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

#### Pediatric Use

Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

### ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,868 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, pooled in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%). Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typically quinolones are italicized.

**GASTROINTESTINAL** (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

**CENTRAL NERVOUS SYSTEM** (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

**SKIN/HYPERSENSITIVITY** (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

**SPECIAL SENSES** blurred vision, disturbed vision, (change in color perception, overbrightness of light, decreased visual acuity, diplopia, eye pain, tinnitus, bad taste).

**MUSCULOSKELETAL** joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout.

**RENAL/URIDGENITAL** interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

**CARDIOVASCULAR** palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

**RESPIRATORY** epistaxis, laryngeal or pulmonary edema, hiccough, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

**Adverse Laboratory Changes** Changes in laboratory parameters listed as adverse events without regard to relationship:

Hepatic - Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic - eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal - Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase; elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis.

### OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

### DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours.

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

### HOW SUPPLIED

Cipro<sup>®</sup> (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

\* Due to susceptible strains of indicated pathogens. See indicated organisms in Brief Summary.

For further information, contact the Miles Information Service:  
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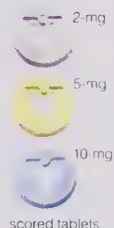
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# JOURNAL

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Photograph by Jim Thomas  
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**FELLOWSHIP** First Mary A. Fraley Cardiovascular Surgical Research Fellow at the Texas Heart Institute, Houston

**OUTSTANDING ACHIEVEMENTS** Author of numerous articles, including "Indications for Early Bypass Grafting Following Intracoronary Streptokinase"; author of "The Female Surgeon—Dawn of a New Era," chapter in *A Century of Black Surgeons—The U.S.A. Experience*; Board of Directors, Association of Black Cardiologists; Secretary, Drew Society

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For respiratory tract infections due to susceptible strains of indicated organisms.

## Summary.

Consult the package literature for prescribing information.

**Indication:** Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:** Known allergy to cephalosporins

**Warnings:** CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

## Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

## Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthralgia, and frequently, fever): 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia.

## Abnormalities in laboratory results of uncertain etiology

- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children)
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clintest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

(06/1088,1)

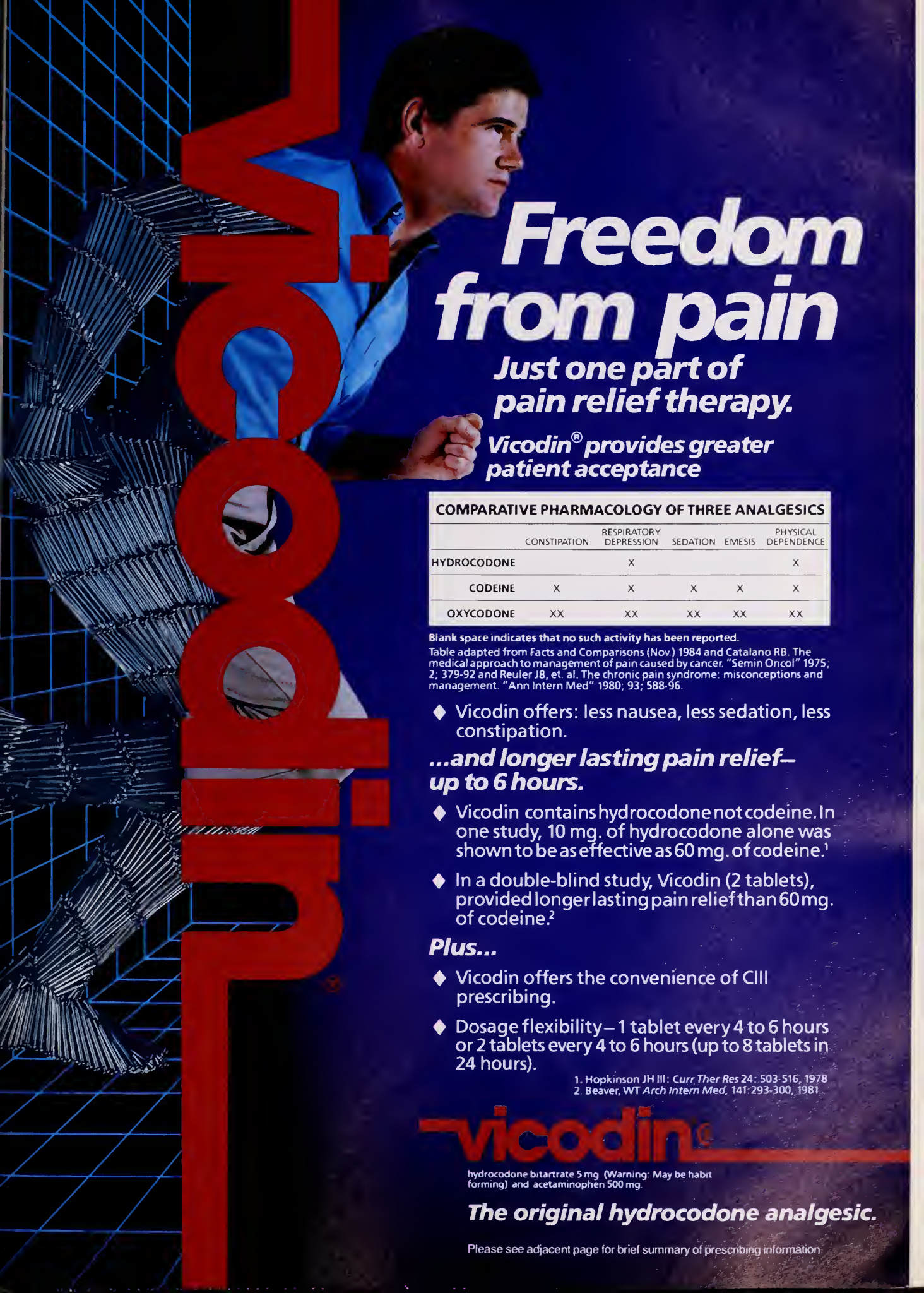
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#### COMPARATIVE PHARMACOLOGY OF THREE ANALGESICS

	CONSTIPATION	RESPIRATORY DEPRESSION	SEDATION	EMESIS	PHYSICAL DEPENDENCE
HYDROCODONE		X			X
CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2; 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93; 588-96.

- ◆ Vicodin offers: less nausea, less sedation, less constipation.

**...and longer lasting pain relief—  
up to 6 hours.**

- ◆ Vicodin contains hydrocodone not codeine. In one study, 10 mg. of hydrocodone alone was shown to be as effective as 60 mg. of codeine.<sup>1</sup>
- ◆ In a double-blind study, Vicodin (2 tablets), provided longer lasting pain relief than 60 mg. of codeine.<sup>2</sup>

#### **Plus...**

- ◆ Vicodin offers the convenience of CIII prescribing.
- ◆ Dosage flexibility—1 tablet every 4 to 6 hours or 2 tablets every 4 to 6 hours (up to 8 tablets in 24 hours).

1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978  
2. Beaver, WT *Arch Intern Med*, 141:293-300, 1981

## **vicodin**

hydrocodone bitartrate 5 mg. (Warning: May be habit forming) and acetaminophen 500 mg.

**The original hydrocodone analgesic.**

Please see adjacent page for brief summary of prescribing information.



# vicodin<sup>®</sup>

(hydrocodone bitartrate 5 mg [Warning: May be habit forming] and acetaminophen 500 mg)

**INDICATIONS AND USAGE:** For the relief of moderate to moderately severe pain.  
**CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone.

## WARNINGS:

**Allergic-Type Reaction:** VICODIN contains sodium metabisulfite, a sulfite that may cause allergic-type reactions including anaphylactic symptoms and life-threatening or less severe asthmatic episodes in certain susceptible people. The overall prevalence of sulfite sensitivity in the general population is unknown and probably low. Sulfite sensitivity is seen more frequently in asthmatic than non-asthmatic people.

**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing. If significant respiratory depression occurs, it may be antagonized by the use of naloxone hydrochloride. (see ADVERSE REACTIONS: Respiratory Depression).

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

## PRECAUTIONS:

**Special Risk Patients:** As with any narcotic analgesic agent, VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. The usual precautions should be observed and the possibility of respiratory depression should be kept in mind.  
**Information for Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex; as with all narcotics, caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** Patients receiving other narcotic analgesics, antipsychotics, anti-anxiety agents, or other CNS depressants (including alcohol) concomitantly with VICODIN may exhibit an additive CNS depression. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The withdrawal signs include irritability and excessive crying, tremors, hyperactive reflexes, increased respiratory rate, increased stools, sneezing, yawning, vomiting, and fever. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose. There is no consensus on the best method of managing withdrawal. Chlorpromazine 0.7 to 1.0 mg/kg q6h, and paregoric 2 to 4 drops/kg q4h, have been used to treat withdrawal symptoms in infants. The duration of therapy is 4 to 28 days, with the dosage decreased as tolerated.

**Labor and Delivery:** As with all narcotics, administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from VICODIN, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

## ADVERSE REACTIONS:

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. The antiemetic phenothiazines are useful in suppressing these effects; however, some phenothiazine derivatives seem to be antianalgesic and to increase the amount of narcotic required to produce pain relief, while other phenothiazines reduce the amount of narcotic required to produce a given level of analgesia. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSAGE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use and the incidence of untoward effects is dose related.

The usual adult dosage is one or two tablets every four to six hours as needed for pain. The total 24 hour dose should not exceed 8 tablets.

Revised June, 1987

5803

Knoll Pharmaceuticals

A Unit of BASF K&F Corporation  
Whippany, New Jersey 07981

BASF Group



# YOCON<sup>®</sup>

## YOHIMBINE HCl

**Description:** Yohimbine is a 3a-15a-20B-17a-hydroxy Yohimbine-16a-carboxylic acid methyl ester. The alkaloid is found in Rubiaceae and related trees. Also in Rauwolfia Serpentina (L) Benth. Yohimbine is an indolalkylamine alkaloid with chemical similarity to reserpine. It is a crystalline powder, odorless. Each compressed tablet contains (1/12 gr.) 5.4 mg of Yohimbine Hydrochloride.

**Action:** Yohimbine blocks presynaptic alpha-2 adrenergic receptors. Its action on peripheral blood vessels resembles that of reserpine, though it is weaker and of short duration. Yohimbine's peripheral autonomic nervous system effect is to increase parasympathetic (cholinergic) and decrease sympathetic (adrenergic) activity. It is to be noted that in male sexual performance, erection is linked to cholinergic activity and to alpha-2 adrenergic blockade which may theoretically result in increased penile inflow, decreased penile outflow or both.

Yohimbine exerts a stimulating action on the mood and may increase anxiety. Such actions have not been adequately studied or related to dosage although they appear to require high doses of the drug. Yohimbine has a mild anti-diuretic action, probably via stimulation of hypothalamic centers and release of posterior pituitary hormone.

Reportedly, Yohimbine exerts no significant influence on cardiac stimulation and other effects mediated by B-adrenergic receptors, its effect on blood pressure, if any, would be to lower it; however no adequate studies are at hand to quantitate this effect in terms of Yohimbine dosage.

**Indications:** Yocon<sup>®</sup> is indicated as a sympatholytic and mydriatic. It may have activity as an aphrodisiac.

**Contraindications:** Renal diseases, and patient's sensitive to the drug. In view of the limited and inadequate information at hand, no precise tabulation can be offered of additional contraindications.

**Warning:** Generally, this drug is not proposed for use in females and certainly must not be used during pregnancy. Neither is this drug proposed for use in pediatric, geriatric or cardio-renal patients with gastric or duodenal ulcer history. Nor should it be used in conjunction with mood-modifying drugs such as antidepressants, or in psychiatric patients in general.

**Adverse Reactions:** Yohimbine readily penetrates the (CNS) and produces a complex pattern of responses in lower doses than required to produce peripheral a-adrenergic blockade. These include, anti-diuresis, a general picture of central excitation including elevation of blood pressure and heart rate, increased motor activity, irritability and tremor. Sweating, nausea and vomiting are common after parenteral administration of the drug.<sup>1,2</sup> Also dizziness, headache, skin flushing reported when used orally.<sup>1,3</sup>

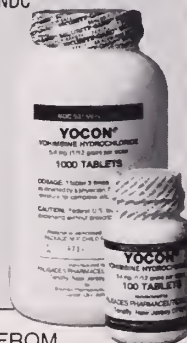
**Dosage and Administration:** Experimental dosage reported in treatment of erectile impotence.<sup>1,3,4</sup> 1 tablet (5.4 mg) 3 times a day, to adult males taken orally. Occasional side effects reported with this dosage are nausea, dizziness or nervousness. In the event of side effects dosage to be reduced to 1/2 tablet 3 times a day, followed by gradual increases to 1 tablet 3 times a day. Reported therapy not more than 10 weeks.<sup>3</sup>

**How Supplied:** Oral tablets of Yocon<sup>®</sup> 1/12 gr. 5.4 mg in bottles of 100's NDC 53159-001-01 and 1000's NDC 53159-001-10.

## References:

1. A. Morales et al., New England Journal of Medicine: 1221, November 12, 1981.
2. Goodman, Gilman — The Pharmacological basis of Therapeutics 6th ed., p. 176-188. McMillan December Rev. 1/85.
3. Weekly Urological Clinical letter, 27:2, July 4, 1983.
4. A. Morales et al., The Journal of Urology 128: 45-47, 1982.

Rev. 1/85



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### Medicare's Three Rs

I had planned to write about Section 9332(C)(1) of the Omnibus Budget Reconciliation Act of 1986, P.L. 99-509, added S1842(1) to the Medicare Act regarding nonparticipating physicians who provide services to Medicare beneficiaries on an unassigned basis which are subsequently determined to be "not reasonable and necessary" under S1842(A)(1) of the act. I had completed about four paragraphs of what I planned to be a little criticism of Medicare's most recent idiocy having to do with refunding monies (eventually) paid for "medically unnecessary" services, procedures, or treatments we had foolishly or defiantly or naively rendered.

Then, right in the middle of my inspired writing, I got this four-page, two-thousand word epistle from our good friends at Aetna Medicare that starts out, "Dear Doctor" and closes with, "Please feel free to call on us if you have any questions or need more information." It was right then that I realized I didn't know what I was writing about. I needed to study the mini-tome from my Medicare gauleiters in much more detail before damning the provisions it described.

So I'm still studying this Orwellian manifesto, and I must admit that my reactions have ranged from total incredulity to bitter amusement to consuming rage.

As the addressee, my name shows through the window of the envelope but it is preceded with my Social Security number that also shows through the window. What follows the specious greeting is any-

thing but specious. It is outrageous. It tells us that we could be fined and indicted for not anticipating what "Medicare" would decide about something we did to, with, or for a patient. "Medicare" now is a thinking entity, capable of exercising judgment and totally autonomous. In the text of the insult, the words *we* and *necessary* and *necessity* and *reasonable* abound, but no person's signature or name or citation appears anywhere on the four pages. Our correspondent is a nonperson. Our uninvited consultant is unknown and, as far as we know, uninformed, untrained, and unlicensed in any profession. It is certain that the "we" in the Medicare maze are unprofessional, unscientific, and unconcerned with outcomes in that "they" do not hesitate to determine that a procedure, treatment, or service is "not reasonable and necessary," in spite of knowing nothing about the circumstances, details, or results of the treatment, service, or procedure.

I'm sorry to say that even after my initial reading of the latest, unsigned "Dear Doctor" letter from Medicare, there are many things I'm not clear about. If I can get permission from whoever wrote it, I'm going to make copies available to all my patients. Maybe they can help me understand who or what is "not reasonable and necessary."

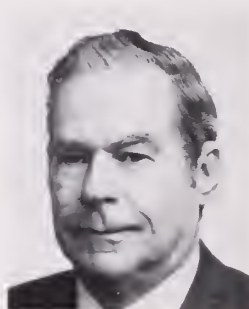
After reading it, I am sure they will understand why I may be forced to quit caring for the "beneficiaries" of Medicare Rules, Regulations, and Refunds.

—MRJ



### Medicine As a Utility

As medical science has evolved and integrated the discoveries of chemistry and biology into the diagnosis and treatment of human disease, the condition of mankind has been marvelously transformed. Only a few generations ago, most human beings spent most of their short lives fighting, or in a beastly struggle for food, and few lived to see their grandchildren. Today, most people can confidently expect a long life, with only modest career disruptions for health reasons. Today we can thankfully say that scientists are more important than generals in the affairs of mankind.



Human progress has always been erratic and fitful, and at times even retrogressive, as during the medieval Dark Ages. But the current flowering of health care science is undoubtedly one of the most brilliant and constructive achievements in human history. Today we are debating whether to spend 11% or 12% of the gross national product for health care at a time when we have an abundance of healthy centenarians and a profusion of robust retirees.

However, this forthcoming medical utopia is costly in money and human resources. The burgeoning ranks of the elderly, with their vast health care needs, evoke the specter of a society that spends most of its national product on health care, with scant resources remaining for optional processes. That dismaying idea is intolerable to the political leaders, and they now demand the costs be reduced.

Surely — they say — the physicians will give up some of their income and continue to care for the patients. If not, their medical licenses will not be renewed. Surely the hospitals can reduce their charges and still be able to provide the high-tech environment that brings the latest medical science to the sick people of the community. If not, they then must provide "free" care or receive *no* government funds. Surely the engineers and technicians that make and operate our new technology will work for nothing so this marvelous medical machine will continue to run as it is.

No?!

In that event, the political solution is for government to take over the machinery and regulate the amount paid in professional fees or hospital

charges or health care workers' salaries. Patients will be assigned to the cheapest doctors, and "preferred provider" lists broadcast. More government patient costs will be shifted to private pay patients. Very expensive procedures will be done only in geographically restricted locations. Surely, then society could continue to have the benefits of this wonderful health care machine.

But will it?

What if the iron government hand has transformed this marvelous machine into a public service company, like the light, gas, and telephone companies? Service is widely available, but the electricity and the gas pressure are metered and unalterable. The professional services bought by the government and dispensed to government patients by the system could be widely available, but would they meet individual patients' medical needs? Would the utility style of service take care of John Doe's diabetes or Mary Roe's eclampsia? Or is human physiology and pathology too complex for government standardized medical care?

A look at medicine practiced in existing government hospitals such as armed services, public health, and Veterans Administration hospitals suggests that government medical facilities function efficiently only when interfaced with and challenged by nearby civilian hospitals in an open market. Government medicine that is unchallenged by unfettered competition from free market medicine quickly degenerates.

When we look at the medical care in those nations where free market medicine has been extinguished, we are reminded of the maxim: "Medical progress is inversely proportional to government participation." Then we understand why United States medicine has entered a significant decline. And we wonder: From whence shall come the next generation of Mayos, Cushings, Jonas Salks, and Papanicolaous?

Will another Dark Age come to medicine?

Can the medical profession keep alight the candle of compassionate medical science during a Dark Age of government-controlled medical care?

Will our profession keep the candle alight?

*Ray V. McIntyre, M.D.*

# Office Management of the HIV-Positive Patient

David W. Potts, MD; Eric L. Westerman, MD; James P. Hutton, MD; Jeffrey A. Beal, MD

*Despite the confusing array of problems seen in HIV-positive patients, office management can be based on clinical findings that, in turn, suggest a logical problem-solving evaluation.*

**A**cquired immunodeficiency syndrome (AIDS), the epidemic of the 1980s, continues to spread at a rate ensuring that almost all primary care physicians at some time will care for patients who are antibody positive for the human immunodeficiency virus (HIV). Not all such patients will have symptomatic disease when first seen. Currently, it cannot be known how many of these patients will develop AIDS or what the timing of such a progression will be. Others will seek care for symptoms of AIDS-related complex (ARC); still others will present with a fully developed complication of AIDS.

Early in the epidemic, the care of AIDS and ARC patients was often rendered by specialists or physicians especially interested in the disease. For example, infectious disease specialists have acquired significant experience in the care of HIV-infected patients because of the problem of opportunistic infections. However, the ever-increasing number of AIDS, ARC, and asymptomatic HIV-infected patients will mean that more of their care needs will be met by primary care providers. This discussion is offered as a guide to help in the office management of patients who are HIV antibody positive.

## INITIAL GENERAL SCREEN

The first step for the physician prior to embarking on a full work-up of a person who is HIV antibody positive is to determine that all screening tests have been confirmed by the Western blot methodology. Once confirmation has been made, the purpose of the initial screening work-up is to classify the patient's current HIV infection as asymptomatic, ARC, or AIDS, and identify any malignancies that may also be present. This database will then be the reference point for future comparison.

The initial general screen begins with the complete history and physical examination. Of special importance is a history of weight loss, chills, fever, diarrhea, or other historical clues to focal system involvement such as headache, cough, or dysphagia. On physical examination, special attention is given to documentation of lymphadenopathy, skin lesions, organomegaly, and signs of herpetic infection, candidiasis, or oral hairy leukoplakia (raised white areas of thickening usually found on the lateral border of the tongue). A careful funduscopic examination should be performed in order to identify retinal lesions of primary HIV retinitis or Cytomegalovirus (CMV) infection. Initial laboratory data should include a complete blood count (CBC) with differential and platelet count, liver function tests, hepatitis B serology, and syphilis serology. Chest x-ray examination should be performed, and a tuberculosis skin test should be placed.

Since the patient may be a candidate for zidovudine (AZT), T-cell subsets should be obtained.

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**Table 1. Guidelines for Immunization of Individuals Infected with HIV**

1. Live vaccines should be used with caution in HIV-infected individuals
  - a. Asymptotically infected children probably can safely receive measles, mumps, and rubella vaccines
  - b. Oral polio vaccine should not be used for anyone in a household with HIV-infected members
2. Routine immunizations with killed or subunit vaccines (eg, diphtheria, pertussis, tetanus, inactivated polio, Haemophilus influenza B vaccines) should be given
3. Hepatitis B vaccine is recommended for individuals in groups at high risk for hepatitis B
4. Pneumococcal vaccine should be considered for all HIV-infected individuals, according to standard recommendations
5. Influenza vaccine should be administered on a yearly basis
6. Passive immunization with appropriate immune globulin should be employed following significant exposure of an HIV-infected individual to someone with measles or varicella-zoster infection
7. Tuberculin testing is not contraindicated; results may be falsely negative in the immunosuppressed HIV-infected individual

Other predictors of progressive disease include HIV antigenemia (currently not available as a licensed test), elevated beta-2 microglobulin, and an elevated erythrocyte sedimentation rate. However, the indications for zidovudine based on these findings have not been established.<sup>1</sup>

## INITIAL MANAGEMENT

Vaccination is an important step in the initial management of an HIV-antibody-positive patient. Live vaccines are a theoretical risk for an HIV-infected patient, but nonlive vaccines are indicated, especially if they can be administered early in the course of the infection prior to severe immunosuppression. The Oklahoma AIDS Task Force guidelines for immunization practices for HIV-infected patients are summarized in Table 1.<sup>2</sup>

Hepatitis B vaccine should be administered if the patient tests negatively for current or past infection (negative surface antigen, negative surface and core antibody) if the patient is in a high-risk group for hepatitis B. Pneumococcal polysaccharide vaccine and yearly influenza vaccine should be administered. The diphtheria-tetanus immunization should be current. Haemophilus influenzae type B vaccine may be useful, but indications are unclear. Other vaccines should be given as indicated; however, live attenuated vaccines such as the polio vaccine may present a risk to the patient and should be avoided. Siblings or children in the same household given live polio vaccine will excrete the attenuated virus and

**Table 2. Suggested Guidelines for the Evaluation of Fever in the HIV-Infected Patient**

For a new fever persisting for more than 2 weeks:

1. Blood cultures: routine, AFB, and fungal (AFB cultures are not routinely done on any patient except those who are HIV positive, since this may be the only way to diagnose disseminated MAI)
2. Serum cryptococcal antigen
3. CBC. If new onset leukopenia or thrombocytopenia identified, then bone marrow with biopsy and culture recommended

may also be a threat to the family member with AIDS. Inactivated polio vaccine should be used instead.

## COUNSELING

Counseling is an important function of the clinician in the care of an HIV-infected individual. Specifically, the patient should be instructed to not donate blood, sperm, or organs; to not share drugs with others; to not share toothbrushes, razors, needles, or any other objects that could be contaminated with blood; and to avoid becoming pregnant.<sup>3</sup> The patient should also be instructed to avoid exchanging body fluids during sexual activity (a condom should be used). The condom does offer risk reduction for those who continue to be sexually active. However, one must realize that a condom is not an alternative to abstinence for prevention of the spread of AIDS. Since sexual contacts of the HIV-infected person need to be informed and tested, the physician needs to make an effort to identify potentially infected contacts and offer methods for their testing and care. The Oklahoma State Department of Health has recently added HIV infection to the list of reportable diseases, and they will assist in partner notification by request.

The patient should be instructed to seek care if the signs and symptoms suggestive of AIDS should arise. These include unexplained weight loss; night sweats; blue or purple skin lesions; long-lasting white lesions or unusual sores in the mouth; lumps in the neck, armpits, or groin lasting more than a month; fever greater than 99° for more than ten days; or diarrhea lasting more than one month.<sup>4</sup>

As a simple practical matter, HIV-infected people should be instructed that where accidents have caused bleeding, contaminated surfaces should be cleaned with a fresh dilution of one part household bleach to ten parts water.<sup>5</sup>

Counseling is also very important for persons requesting an HIV-antibody test. Most such individuals will prove to be negative, but only through



**Table 3. Suggested Guidelines for the Evaluation of Headache in the HIV-Infected Patient**

- For headache persisting for more than 2 weeks
- OR
- New headache with fever
- OR
- Headache with memory loss, confusion or motor dysfunction:
- 1. Lumbar puncture: routine studies — cell counts, total protein, glucose, VDRL, gram stain, routine cultures — Cryptococcal antigen and India ink — AFB, fungal, and viral cultures
- 2. Serum cryptococcal antigen
- 3. Toxoplasma serology (may be falsely negative)
- 4. CT brain scan or MRI (if seizures or focal, progressive, or unexplained findings present)

**Table 4. Suggested Guidelines for the Evaluation of Diarrhea in the HIV-Infected Patient**

- For diarrhea persisting for one month
- OR
- Acute diarrhea with fever
- OR
- Blood in stools:
- 1. Rectal culture for GC
- 2. Stool exam:
  - Cultures for campylobacter, salmonella, shigella, and yeast
  - AFB smear and culture (for both MAI and cryptosporidia)
  - Standard ova and parasite preparations
- 3. If negative results in 1 and 2, colonoscopy with biopsy of any lesion for histology and culture for AFB, fungus, and virus (since CMV and Herpes simplex may cause atypical lesions)
- 4. If negative results above, then small bowel biopsy (especially to rule out giardia)

evaluation and subsequent reduction of risk will they learn how to remain negative.

## INFECTION IN AIDS PATIENTS

If and when the patient begins to develop symptoms, further work-up will be indicated. Opportunistic infection is the major threat, and the pathogenic organisms seen in high frequency are *Pneumocystis carinii*, *Candida*, progressive or disseminated herpes simplex, *Cryptococcus neoformans*, and CMV. Those of a medium frequency are *Toxoplasma gondii*, *Cryptosporidium*, *Isospora belli*, *Mycobacterium tuberculosis*, atypical mycobacteria (especially *M avium intracellulare* or MAI), *Salmonella*, Epstein-Barr virus, and disseminated Histoplasma. Low-frequency infections include progressive multifocal leukoencephalopathy, zoster, listeriosis, strongyloidiasis, aspergillosis, and nocardiasis.

Certain symptoms in the HIV-antibody-positive patient are disturbing as they are apt to portend opportunistic disease and require evaluation, especially if persistent. A new fever persisting longer than two weeks should trigger a work-up that includes blood cultures for routine, fungal, and acid-fast organisms. Acid-fast bacillus (AFB) blood cultures are not routine for all patients, but should be done in the HIV-infected patient, as such cultures may be the only way to diagnose disseminated MAI infections. These are specifically requested, as no laboratory will routinely perform AFB blood cultures. Lysis centrifugation methods of culture enhance AFB recovery. Serum cryptococcal antigen and the CBC are other aids in the fever work-up. If the white blood cell count shows new onset leukopenia or thrombocytopenia, then a bone marrow biopsy with cultures is suggested (Table 2).

A headache persisting for more than two weeks, especially if associated with fever, memory loss,

confusion, or motor dysfunction, indicates a need for central nervous system work-up. Blood cultures and serum cryptococcal antigen are once again useful. Toxoplasma serology is available, but false negatives are a major problem with this test. In the absence of focal findings, a lumbar puncture is necessary for cerebrospinal fluid (CSF) examination to include the routine studies, cryptococcal antigen, India ink examination, and cultures for AFB, fungus, and virus (the tube for viral culture should be submitted in wet ice). Recommended routine CSF tests are cell counts, total protein, glucose, Venereal Disease Research Laboratories (VDRL) test, Gram stain, and routine culture. Focal or other progressive and unexplained findings may be further evaluated with a computerized tomography (CT) brain scan and/or magnetic resonance imaging (MRI) (Table 3).

If the HIV-infected patient has diarrhea persisting for one month, or acute diarrhea with fever, severe dehydration, or blood in the stools, then a diarrhea work-up is needed. We recommend a rectal culture for gonococcus and a stool culture for *Campylobacter*, *Salmonella*, *Shigella*, and yeast. Stool examination for ova and parasites, stool AFB cultures, and smears are suggested. AFB smears are useful for identifying acid-fast mycobacteria and cryptosporidia. If this is unrevealing, then colonoscopy is recommended, with biopsy of any noted lesion for histological examination and culture of the tissue for AFB, fungus, and virus since CMV and herpes simplex may cause atypical lesions. If this is also unrevealing, then a small bowel biopsy or duodenal aspirate may be considered to rule out giardiasis, strongyloidiasis, or disseminated MAI (Table 4).

**Table 5. Suggested Guidelines for the Evaluation of Dysphagia in the HIV-Infected Patient**

For dysphagia or odynophagia persisting for five days  
OR  
Dysphagia or odynophagia associated with fever:  
— Esophagogastroduodenoscopy with biopsy of any lesions for histology and culture for fungus or virus (Herpes simplex, CMV, and candida are common causes of esophagitis with a similar gross appearance at endoscopy)

Pain or difficulty in swallowing that persists for five days, or a new onset of these symptoms with fever, would mandate a dysphagia work-up. Prominent evidence of oral thrush strongly supports esophageal involvement in this setting and may justify empiric therapy with nystatin or ketoconazole. If a diagnosis of AIDS has not been previously documented, endoscopy should be performed to demonstrate the lesion, since it would meet criteria for AIDS. Esophagogastroduodenoscopy should be accompanied with biopsies that are submitted for histological examination and culture for fungus and virus. Herpes simplex, CMV, and candida are common causes of esophagitis and may have the same gross appearance at endoscopy (Table 5).

A new cough lasting more than two weeks, or cough with fever or dyspnea, or new dyspnea of any kind, are indications for pulmonary work-up. Chest x-ray and arterial blood gas readings should be obtained. However, pneumocystis or CMV pneumonia can occur in people with normal chest x-rays and normal blood gases. Induced sputum for routine and viral cultures, AFB, and fungal cultures and smears are indicated. Expecterated samples closely examined by silver and Giemsa stains for pneumocystis organisms are useful and may obviate the need for bronchoscopy. In a patient who is stable and not seriously ill, it is acceptable to await these results; however, in an unstable patient, further, more aggressive work-up is indicated, including fiberoptic bronchoscopy (FOB). FOB with bronchoalveolar lavage (BAL) is suggested if the chest x-ray is abnormal. If the chest x-ray is normal but the blood gases are abnormal, or if dyspnea is present, a gallium lung scan may guide the bronchoscopist to the affected area. With this work-up, open lung biopsy is almost never needed (Table 6). Serum lactate dehydrogenase determination is useful to monitor activity of pneumocystis pneumonia since levels are elevated in more than 90% of those with active disease.<sup>6</sup>

As a final point, primary HIV disease can cause central nervous system, gastrointestinal, and

**Table 6. Suggested Guidelines for the Evaluation of Cough or Dyspnea in the HIV-Infected Patient**

- For new cough persisting for more than two weeks:
1. Induced sputum for:
    - Routine AFB and fungal cultures and smears
    - Viral cultures
    - Giemsa and silver stains for pneumocystis
  2. Chest x-ray:
    - If abnormal, then fiberoptic bronchoscopy (FOB) with bronchoalveolar lavage (BAL)
    - If normal, then consider ABGs and, if abnormal OR if dyspnea present, consider gallium lung scan
    - If gallium scan is positive, then FOB with BAL
  3. If the patient is unstable, consider FOB with BAL as soon as possible

musculoskeletal problems. Because of this, work-up of body symptoms will often be negative, since the symptoms may be secondary to the HIV virus as the primary infective pathogen. However, depending on the severity of symptoms and their duration, repeat evaluation may be necessary.

## THERAPY

For most patients with AIDS, treatment is directed toward the opportunistic diseases that develop. There are experimental antiviral drugs that seem to stop or slow the reproduction of the AIDS virus; currently the only recognized therapeutic agent directed against the AIDS virus is zidovudine (AZT) which is given as two 100 mg capsules orally every four hours (1200 mg per day). AZT is indicated in symptomatic AIDS patients with documented pneumocystis pneumonia or in ARC patients who have an absolute CD<sub>4</sub> (T<sub>4</sub>) lymphocyte (helper cell) count of less than 200/mm<sup>3</sup> ( $\cdot 2 \cdot 10^9/L$ ).<sup>6</sup> AZT is approved by the Food and Drug Administration (FDA) and is available through pharmacies like any other prescription. Indications for other patients who have had serious opportunistic infections are not established, but AZT is likely to become standard therapy.

AZT therapy has been associated with significant hematologic toxicities of granulocytopenia and severe anemia that require CBC monitoring at least every two weeks. These toxicities are more severe in persons with AIDS than with ARC. The anemia usually occurs after four to six weeks of therapy and requires either a decrease in dosage, drug discontinuation, and/or blood transfusions. Great caution is advised in the use of the drug in patients who have hemoglobin levels less than 9.5 g/dl (95 g/L) and granulocyte counts less than 1,000 mm<sup>3</sup> ( $1 \cdot 10^9/L$ ). It is advisable to stop therapy if the hemoglobin level drops to less than 7.5 g/dl (75 g/L), or by 25% of the



pretreatment level, or if the granulocyte count drops to less than  $750/\text{mm}^3$  ( $.75 \times 10^9/\text{L}$ ), or by 50% of the pretreatment levels, until some marrow recovery occurs. For less severe anemia and granulocytopenia, the daily dose can be reduced, usually to 600 mg per day.<sup>7</sup> Concurrent use of acetaminophen is associated with higher frequency of toxicity and should be avoided.

Discussion of the therapies of the multitude of opportunistic infections that occur in HIV-infected people is beyond the scope of this article. Specifically, however, the therapy of pneumocystis pneumonia deserves mention as it is the most common serious infection, occurring in up to 80% of AIDS patients at some time in their illness.

The major therapeutic agents for pneumocystis pneumonia are trimethoprim/sulfamethoxazole and pentamidine. The dosage of the trimethoprim/sulfa combination is 100 mg/kg/day of sulfamethoxazole given in four divided doses that can be administered orally or intravenously. Pentamidine isothionate is given in a dosage of 4 mg/kg/day either intramuscularly or intravenously. Both regimens have high rates of toxicity, making them less than ideal. Recently, dapsone at 100 mg/day combined with trimethoprim has been used, with toxicity comparable to the trimethoprim/sulfamethoxazole combination.<sup>8</sup> Methylprednisolone has been reported to be a useful adjunctive therapy in patients with pulmonary failure.<sup>9</sup>

Another potentially valuable mode of therapy for pneumocystis pneumonia is inhaled pentamidine at a dosage of 600 mg daily for 21 days. It is necessary to deliver this agent by a nebulizer that produces droplets of 1.5 to 3 microns in diameter; this greatly increases the distribution of pentamidine in the alveoli. The nebulizer Respigard II<sup>®</sup> was specifically designed for this purpose. This nebulizer is designed with exhalation filters to prevent contamination of the environment with pentamidine. Early studies of this type of therapy at San Francisco General Hospital suggest that it is efficacious and without major adverse reactions since systemic absorption does not occur.<sup>10</sup> Such inhalation therapy can be given with ease on an outpatient basis. Patients failing standard therapies may be candidates for compassionate use of trimetrexate, which has looked promising in trials thus far (Hotline number 1-800-426-7527).

For the suppressive therapy directed against pneumocystis, the only licensed drug that is effective is the trimethoprim/sulfamethoxazole combination, and this can be given either as one double-strength

tablet daily or one double-strength tablet three times weekly. Preliminary data also support the use of daily dapsone or inhaled pentamidine given monthly or bimonthly for suppression.

Several investigational agents are being studied that potentially are helpful in HIV-infected patients. One such agent is 9-(1,3-dihydroxy-2-propoxymethyl) guanine, known as ganciclovir, which recently has been described as a possible therapy for CMV gastrointestinal disease. The main toxicity of this agent is leukopenia, which is usually reversible within one week after the drug is stopped.<sup>11</sup> Clofazamine and rifabutin are investigational agents that are directed against MAI, an organism that typically is resistant to standard antimycobacterium agents. Clofazamine is available by prescription because it is FDA-approved for leprosy. Although rifabutin is still investigational, it may be obtained through the Centers for Disease Control, Atlanta, for compassionate use on an experimental protocol.

## DISEASE PROGRESSION

Recently it has been reported that AIDS developed in 13 of 100 patients who were HIV antibody positive with persistent generalized lymphadenopathy; they had been followed for a median of two years, indicating a three-year progression rate of 21%. The best predictor of disease progression was oral candida, which occurred in 12 of 13. Lymphopenia less than  $1,500 (1.5 \times 10^9/\text{L})$ , elevated erythrocyte sedimentation rate (ESR) greater than 15 mm/hr, and anemia less than 13 g/dl ( $130 \text{ g/L}$ ) also were predictive of disease progression. It was concluded that the risk of progression in patients who are HIV infected and who have generalized lymphadenopathy can be predicted by the physical examination and basic laboratory tests.<sup>12</sup>

A prospective evaluation from the National Cancer Institute (NCI) demonstrated that the risk of progression of AIDS in HIV-infected people could be predicted by a total number of circulating  $\text{CD}_4$  ( $\text{T}_4$ ) lymphocytes count at the time of initial evaluation. A  $\text{CD}_4$  count of less than  $300/\text{mm}^3$  ( $.3 \times 10^9/\text{L}$ ) was associated with a relative risk that was almost thirteen times greater than those who had a  $\text{CD}_4$  count of greater than 550 ( $.55 \times 10^9/\text{L}$ ). Those with  $\text{CD}_4$  counts between 400 ( $.4 \times 10^9/\text{L}$ ) and 549 ( $.549 \times 10^9/\text{L}$ ) had a relative risk approximately 2.5 times greater, and those with counts between 300 ( $.3 \times 10^9/\text{L}$ ) and 399 ( $.399 \times 10^9/\text{L}$ ) had approximately 6.5 times greater risk of developing AIDS than those with counts greater than 550 ( $.55 \times 10^9/\text{L}$ ).<sup>13</sup> Evidence for elevated beta-2



microglobulin greater than 5.0 mg/liter and p<sup>24</sup> antigenemia as useful predictors of disease progression also is convincing.<sup>14</sup>

## PRECAUTIONS FOR MEDICAL PERSONNEL

Throughout the short history of the HIV organism, recommended guidelines have evolved to prevent HIV transmission. Currently it is prudent to treat every patient and every blood sample as potentially infectious. The experience of one clinical chemistry laboratory has recently been reported concerning the prevalence of the HIV antibody and hepatitis B surface antigen in submitted blood samples.<sup>15</sup> It was found that 8.7% of specimens contained either hepatitis B surface antigen or the HIV antibody. Some of these samples had been marked with a biohazard warning label. However, there were 473 specimens without a warning label, of which 5.7% contained either the hepatitis B surface antigen or the HIV antibody. It is recommended that all laboratory personnel should be vaccinated against hepatitis B and should handle all blood specimens as if they were infected, whether or not the specimens were designated by biohazard labels.

It was speculated by the authors that the use of biohazard labels may lead to less careful handling of those specimens without the warning label, which may actually increase the risk of health care workers to HIV or hepatitis B virus exposure.<sup>15</sup> Universal blood precautions state that one should assume all patients to be potentially hazardous; one should use gloves when touching any body fluid or tissue, especially bloody materials; one should use gowns, eyewear, and/or masks whenever splattering is likely; one should handle all specimens carefully; and one should avoid recapping needles.

When decontaminating instruments or medical devices, commonly used germicidal agents are adequate if they are mycobactericidal, since mycobacteria represent one of the most resistant groups of microorganisms to disinfect. A freshly prepared solution of sodium hypochlorite (household bleach) is an inexpensive and very effective germicide in either a 1:10 dilution or even a 1:100 dilution, depending upon the degree of contamination.<sup>16</sup>

## SUMMARY

In Oklahoma, the actual number of new AIDS cases reported in 1987 was 117. Projections are that by 1991 there will be 1,600 new cases and countless more patients with AIDS-related complex, as well as asymptomatic people who are HIV infected. The

burden of care will have to be assumed to some degree by primary care providers. This paper has discussed recommendations concerning the initial screening work-up, counseling, and management of HIV-infected patients; further work-up and therapy as symptoms develop; and precautions for medical personnel to prevent HIV transmission. These recommendations constitute guidelines for the office management of the HIV-infected patient. □

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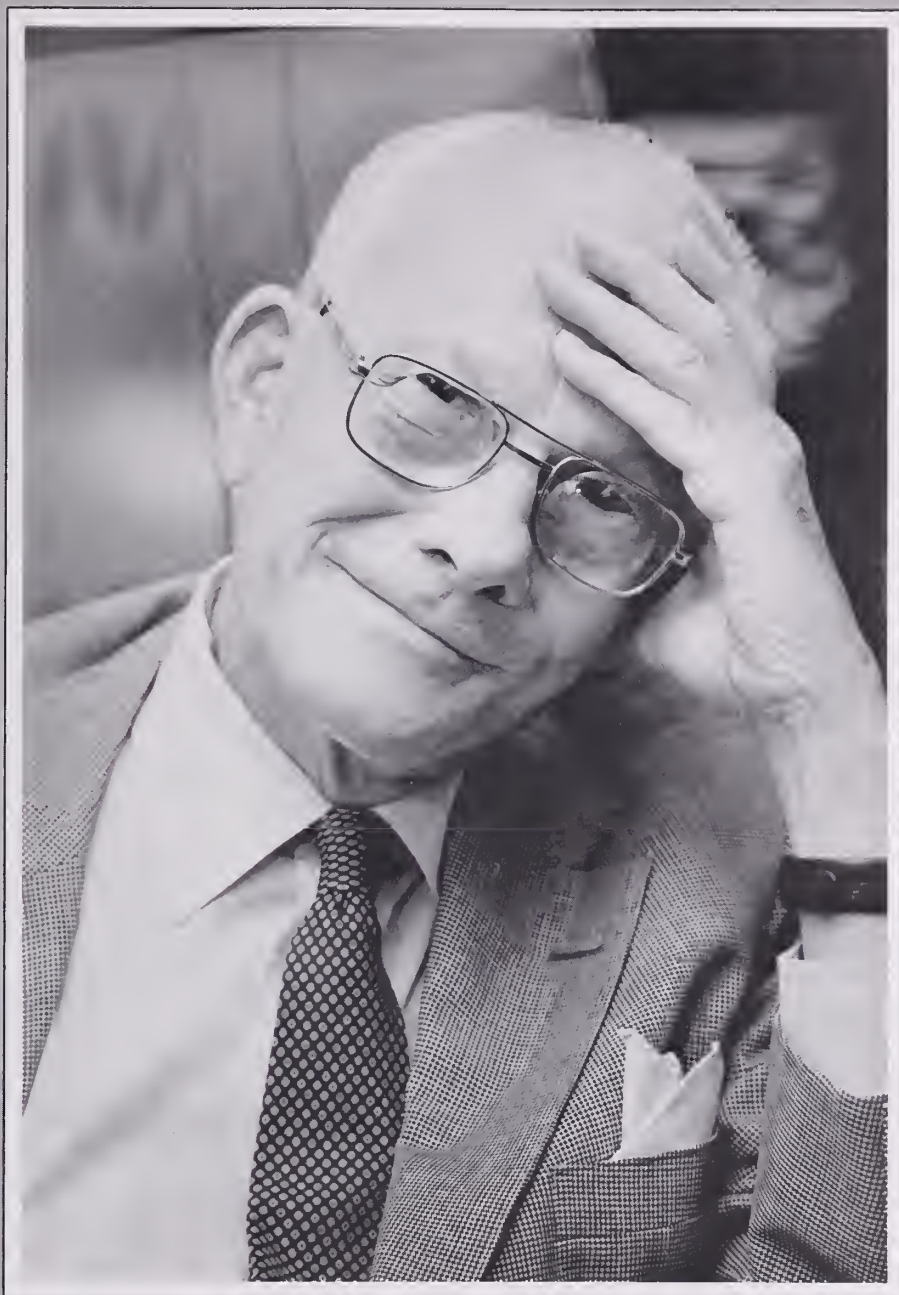
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***Leaders in Medicine***

***Hayden H. Donahue, MD***

*By Richard Green  
Photographs by Jim Thomas*



The patients' activity center is filling up this Friday morning just before 8:30, but not with patients. Mental health professionals from around the state have gathered on the campus of Central State Griffin Memorial Hospital in Norman, Okla, for a day-long seminar.

Two directors of a mental health institute in Madison, Wis, will present a comprehensive model for understanding and managing aggressive inpatients. They are introduced by an older, gray-haired man.

The man then introduces himself as Hayden Donahue and, using a microphone in this room that doubles as a gymnasium, mentions upcoming seminars and the location of those twin necessities of any seminar, the coffee urn and the bathrooms.

Most of the audience knows that their host, Dr Donahue, has had a long and distinguished career in Oklahoma's mental health system. But few of them know that he actually guided its development from the "snake pit" days to the modern era of humane care and the decentralization of mental health treatment. Moreover, Donahue was one of about a dozen American psychiatrists who were primarily responsible for the national community mental health movement. In fact, he got the jump on his learned and influential colleagues by getting federal approval and funding for the nation's first comprehensive community mental health center to be built from the ground up. It was constructed in 1968 adjacent to the campus where the seminar is being held.

Although a few members of the audience have more than a cursory knowledge of Donahue's accomplishments, his name is virtually

unknown by the general public. Hayden Donahue is probably much less well known than Oklahoma's other long-time public service titan, Lloyd Rader, whose career in power (as director of public welfare) paralleled Donahue's.

Much of the reason for this difference in notoriety was Rader's



relatively flamboyant, domineering personality and masterful manipulation of the political system and its politicians to achieve his goals.

Donahue was no less effective for mental health, but his method, like his personality, was low-key. When he was trying to get funding for a community mental health center in McAlester, he went to Carl Albert and said, "Mr Speaker, surely you can help us with funding to build the 'Carl Albert Community Mental Center.'" Allegedly, that was all Donahue said, and the money materialized in due course.

Of course, Donahue hadn't based his hope on mere personal vanity,

though an offer to memorialize a man's memory for the ages couldn't have hurt. The request was based on need, as Carl Albert understood, for Donahue was respected and trusted by the great majority of Oklahoma's public officials.

That's not to imply that Hayden Donahue always got what he wanted. Far from it. In fact, he was so discouraged after seven years on the job that he quit and left the state. But he returned in 1961 to lead the state into an enlightened era of mental health care.

And that is why the Oklahoma Legislature in 1977 named Central State Hospital and the sprawling mental health complex around it, the Hayden H. Donahue Mental Health Institute. As some of those legislators could attest from their memories of Central State in the early 1950s, the progress had been dramatic, even inspirational.

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It had been almost seven years since reporter Mike Gorman's exposé on the deplorable conditions at Central State Hospital appeared in *The Daily Oklahoman*. And though Gorman's series would form the basis for a national movement to improve the care and treatment of the mentally ill in the United States, no consequential reforms had been carried out at Central State by 1952.

The 1947 legislature had created a mental health section, but since it was part of the State Board of Public Affairs, the new section was virtually powerless. That is one reason why the wretched conditions at the hospital hadn't improved by 1952.

Help was on the way, however. A group of legislators led by J. R. Hall formed to rewrite the state's



mental health statutes. Since they needed expert help, they called on Dr Hayden Hackney Donahue, a 40-year-old native Oklahoman who was then the assistant director of the mental hospital system in Texas. Before that, he had received several national awards for his innovations and improvements at the Arkansas State Hospital in Little Rock.

Donahue, a legislative committee, and Earl Sneed, the dean of the University of Oklahoma's law school, drafted the proposed legislation. It set up a mental health department governed by a seven-member board appointed by the governor and confirmed by the senate.

Donahue, who had returned to Austin, was called back to Oklahoma City and offered the job as the state's first director of the De-

partment of Mental Health. He accepted, even though no department then existed, because the job was offered by three men he trusted: Speaker of the House Jim Nance, President Pro Tempore Raymond Gary, and Governor Johnston Murray.

When Donahue arrived in December 1952, Oklahoma had four mental hospitals: Central State, Eastern State in Vinita, Western State in Fort Supply, and in Taft, the nation's only mental hospital of, by, and for black people. Most of the hospitals' buildings were old and dilapidated, and all of them were overrun with patients living in hopelessness and squalor. There were 8,620 patients and somewhat fewer beds.

At night on some wards, mattresses covered part of some day room floors. On average, there

were four toilets and one bathtub for every 90 patients. Those who were incontinent or too psychotic to observe basic personal hygiene practices were hosed down periodically by aides. The food was generally poor and was prepared by unprofessional, unsanitary patient workers. There were essentially no activities for patients, and the only "treatment" consisted of procedures to render unruly or violent patients more docile. The devices employed ranged from restraining sheets and sedatives to electroshock to prefrontal lobotomies.

The hospitals weren't even decent custodial institutions. There was an unstated supposition that patients in mental hospitals had deteriorated into a permanent sub-human state that resulted from their own wickedness. A few of the aides had psychopathologies of



Donahue pauses during a busy day at the Hayden H. Donahue Mental Health Institute in Norman. The institute, created in 1978 by an appreciative state legislature, includes the nation's first community mental health center.

their own and often were cruel and abusive. While the great majority of aides acted compassionately, there weren't enough of them. In fact, the patient-to-aide ratio was 80 to one, and none of the aides had had professional training.

Despite this high ratio, aides virtually ran the hospitals by virtue of their superior numbers. At Central State, the mental health department's so-called "teaching" hospital with more than 3,000 patients, there were seven physicians and three nurses.

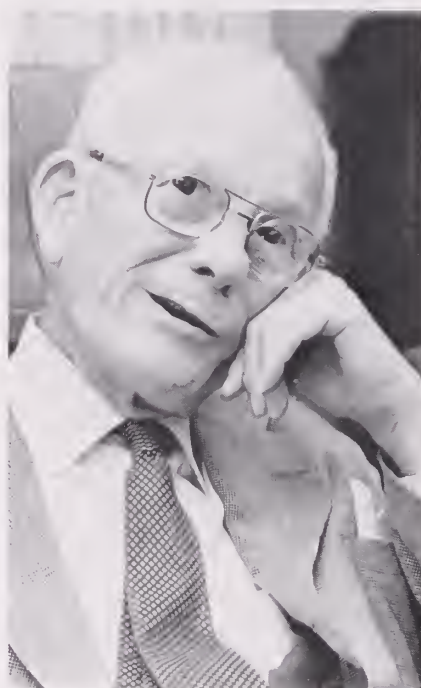
Hayden Donahue was hired not to preside over these hospitals, but to revolutionize the state's mental health care system. The task was immense, but not impossible, as some who had been through Central State believed. Dr Donahue was ideally suited to the job. He had had excellent training and experience and was committed to making the practice of psychiatry and mental health care generally more scientific, effective, and humane.

Yet, his predecessor as the state's top mental health official also had been well schooled and intentioned, and the snake pits still existed. Donahue's success would depend on his ability to communicate with Oklahoma's political leaders and members of the new mental health board. He was articulate and energetic, neither stuffy nor dogmatic, and like many of them, he was still an Oklahoma country boy.

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**H**enry and Mayme Donahue had just moved to El Reno in 1912 when their second child, Hayden, was born. He was named after his grandfather's brother, whose ownership of several general stores in Kansas and

Oklahoma Territory had made him a millionaire. The family, including Helen, Hayden's seven-year-old sister, had lived in El Reno only a short time before Henry's attempt to organize a labor union got him into trouble with his employer, the Rock Island Railroad.



The family moved to Pittsburg, a town 20 miles south of McAlester that was owned lock, stock, and barrel by McAlester Fuel Company. The company operated three of the region's numerous coal mines. In fact, Henry, an administrator at one of the mines, was paid in company script. Hayden remembers that the company store was arranged to accommodate its customers from cradle to grave: "At the front, they sold baby things, and then children's stuff, and at the back there was a funeral parlor."

Hayden's childhood was virtually idyllic. The family lived in town but had a cow and some chickens. Hayden played stickball and

baseball, hiked through the woods, was exposed to the town's Italian and Welsh communities, and became a big brother when Jim was born in 1916. With the encouragement and prodding of his parents and some good teachers, Hayden also became an honor student and an excellent and avid debater.

By the middle 1920s, coal mining in Oklahoma was in decline, and the Donahues moved several times during the next few years as Donahue's father tried to sell Oklahoma coal. They finally settled in Sioux City, Iowa, when Hayden was a high school senior. He can't remember when or why, but during this nomadic interval, he developed an interest in medicine. A self-described bookworm, Hayden began reading everything he could about doctoring.

However, when he enrolled at the University of South Dakota in 1930, he majored in engineering, thinking he could support himself sooner than if he pursued medicine. The Great Crash of October 1929 had wiped out the family's savings, but an uncle, who was an alumnus of the University of Kansas, provided a partial subsidy so Hayden could attend KU.

Hayden studied premed and engineering simultaneously as a means of eventually attending medical school. By 1934, he had all the prerequisites except the money, so he used his engineering background to work for the Public Works Administration and the state of Kansas, surveying and designing lakes and making topographical maps.

By "saving every nickel I could," and with a \$760 loan from a friend of the family, a surgeon, Donahue enrolled in 1937 in KU's medical school. It had one of the finest reputations in the US, and its basic science courses were meant to ensure



that only the best students would survive.

Hayden not only thrived on the coursework but also held down a part-time job on a research ward, where precursors to sulfanilamides were being tested on patients with pneumonia. He would recall later that while in medical school, he "came down sick as a dog" with pneumonia and was treated successfully with one of these research drugs.

His task as an orderly was basic patient care, which he says proved to be a sound foundation for his medical career. While many see that job as unpleasant "grunt work," Donahue took the opportunity to learn from and about the patients. This contact helped provide a more humane approach to his practice, which would be especially evident after he began practicing psychiatry.

Psychiatry was in its formative stages in the US, and the scant exposure to it that Hayden and his classmates received was incomprehensible. "We had been bombarded with all this physical stuff, and here's Karl Menninger talking about *id* and *ego* — I didn't know if it was crazy or not, but it didn't make sense to me," says Donahue. Today, he enjoys saying that after he heard Karl Menninger's lectures, he decided to be an orthopedic surgeon.

As it turned out, Menninger's dynamic psychiatry scared most of the students. "I was the only member of our class to become a psychiatrist," Donahue says.

Donahue had spent a three-month externship in orthopedics between his junior and senior years, but upon graduation in 1941 accepted an internship at the University of Georgia, where research in vitamin deficiency diseases was being conducted.

Pellagra was the top vitamin deficiency disease in the nation. It was manifested by gastrointestinal and skin problems and depression; yet, many persons suffering from pellagra — which results from a lack of niacin in the diet — were being committed to mental hospitals.

**"If we don't get more trained people out in the community, we may see more patients back in the mental hospitals."**

—Hayden H. Donahue, MD

At the University of Georgia, Donahue met a psychiatrist named Hervey Cleckley, who among other things, was evaluating the psychiatric symptoms associated with vitamin deficiency diseases, including pellagra. Cleckley and Donahue were impressed with one another; Cleckley had written a book on psychopathology, *The Mask of Sanity*, which Donahue thought reflected the author's brilliance and scholarship. Cleckley was looking to start a psychiatry department, and Donahue, bright, energetic, and talented, was precisely the sort of recruit he wanted.

Their professional association was delayed, however, by an out-

break of polio. "Before I knew it, I had 50 patients," remembers Donahue, who spent a month applying hot packs and splints, medical science's best known method at that time for preventing paralysis.

Though he spent a month on the polio ward, Donahue says he never even considered the possibility that he might contract the disease himself. "If I'd ever stopped to think about it, I'd have been scared to death," he observes, laughing. "But, hell, I was the doctor," he adds brusquely, using a sentiment and tone that resurrects that youthful attitude of invulnerability and single-mindedness.

Later that year, Donahue became Cleckley's (and the University of Georgia's) first psychiatry resident. And Cleckley became Donahue's first mentor. They began their relationship by trying a new procedure, electroshock therapy, in the treatment of some of their most intractable patients.

"Cleckley ordered the machine, and when it arrived we told our first patient, a 45-year-old chronically depressed man, what we had in mind," Donahue recalls. "We said we didn't know how it worked, but that some patients had obtained good therapeutic benefits.

"He was agreeable, so we took out the manual and determined where to place the electrodes, and the prescribed voltage. Then I pushed the button. And this guy like to flew off the table. It scared both Cleckley and me. Next time, we got four aides to hold the patient down."

In the years before muscle relaxants and anesthesia were introduced, using electroshock therapy was really an intrepid endeavor. But the results obtained with some patients were undeniable and dramatic. After a few treat-

ments, in only a week's time, people were coming out of depressions that had imprisoned them for years. Fortunately for Cleckley and Donahue, their patients experienced none of the treatment's severe side effects, such as broken spines.

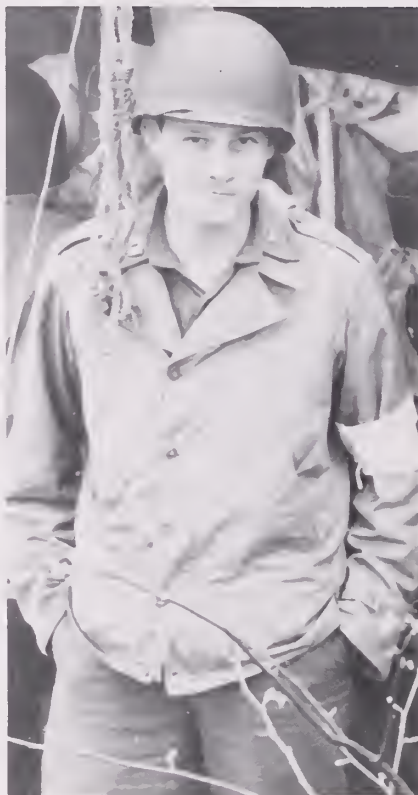
Once electroshock had, in effect, gotten the patient's attention, Cleckley used short-term psychotherapy to help root out the disease's cause. Psychotherapy was particularly effective for neurotic patients. Cleckley taught that discovering the cause of one's anxieties was the prerequisite for learning how to avoid or deal with them.

After Donahue participated in several of these sessions, he found he had "a knack" for the technique. Cleckley often observed and critiqued Donahue, who seemed to grow more comfortable and effective by the week. Cleckley made plans to increase the size of the department and make Donahue his chief resident. But the Japanese attack on Pearl Harbor changed everything.

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Donahue's experience in the military during World War II as a flight surgeon and psychiatrist was a turning point in his life. It expanded his scope from individual patient care to the idea of developing an enlightened system of mental health care. Its origins were based on field hospitals that were placed halfway between the battle front and the rear lines. The idea was that treating casualties in an environment that was neither too dangerous nor too placid would enable more of the soldiers to return to action emotionally intact.

These halfway hospitals were



*A young Donahue relaxes, just days before shipping out to North Africa. Below, right, he stands beside psychiatrist-neurologist Ray Grinker, his commanding officer in Africa and future professional associate.*

the idea of Donahue's commanding officer in North Africa, psychiatrist-neurologist Ray Grinker. He had been arguing that more casualties were "unglued" mentally (from combat fatigue) than physically. And these men needed psychiatric treatment; simply removing them from combat was no cure. As the evidence supporting his claim mounted, the Army Air Force discovered that psychiatrists were rare birds indeed. Grinker, therefore, was ordered to develop and run a three-month training program in psychiatry for physicians.

For his training facility and hospital, Grinker was given a former resort hotel on the beach in St. Petersburg, Fla. He took along his assistant, Hayden Donahue, as director of professional services. Under Grinker, who had studied twice with Sigmund Freud and set up the University of Chicago's psychiatry department, Donahue continued to learn psychiatry from a master.





GIs with severe cases of combat fatigue were sent to the hospital for treatment and rehabilitation. With sodium pentathol, they were placed in a semiconscious state as a means of gaining access to their subconscious, where the source of their anxiety and tension was hidden. Once the source was discovered and verbalized, healing could begin. As Donahue learned, the source wasn't always fear.

In one case, a pilot had remained severely incapacitated since the death of his "best friend," who had been killed on a mission. What the pilot had repressed was his resentment toward the other man. "The bastard always got the recognition," he said, beginning a seething tirade of bitterness that surprised the pilot as much as it did Donahue.

For 18 months, until fall of 1945, Grinker, Donahue, and their staff successfully ran both training and treatment programs. Then General Omar Bradley enlisted Donahue's help and had him transferred to the VA Central Office in Washington to assist in designing new hospital programs and services.

By the time he completed this assignment, the Air Force was accepting resignations from those men who had been "frozen" in the service after the Japanese surrender. Donahue asked for and received an assignment as acting manager of the VA hospital in North Little Rock, Ark.

In 1948, Donahue resigned from the VA and settled in Little Rock, where he and psychiatrist George Jackson, new superintendent of the Arkansas state hospital, began the reformation of the hospital. They functioned as a team; Jackson dealt with the powers-that-be and Donahue ran the programs. By the time they left in 1950, they

had received several citations of merit for innovative mental health programs from the American Psychiatric Association.

(There had been some notable changes in Donahue's personal life, too, while he was in Little Rock. He had married Patricia Toothaker of San Antonio in 1947,



*In 1953, as the first director of Oklahoma's Department of Mental Health, Donahue makes one of numerous appearances statewide, seeking public support for mental health reform.*

and by 1948 they had the first of their three daughters, Erin, Kerry, and Patty.)

Donahue and Jackson actually were lured away by an offer to run the Texas Department of Institutions, which consisted of five mental hospitals and a variety of other facilities ranging from institutions for the blind and deaf and tubercular to an Indian reservation.

During their initial grace period, they had some success. For example, they started a new cere-

bral palsy unit on Galveston Island, and it was soon swamped with patients. The only way to expand it, Donahue found, was to "pump up some more soil into Texas."

Nevertheless, they were considerably less successful in Texas than they had been in Arkansas because many of their ideas, such as doing away with patronage, were anathema to those in power. It was soon apparent that the state's political leadership wouldn't tolerate any substantial changes in its system of doing business. At this point, in 1952, Donahue got the offer from Oklahoma officials, who seemed a good deal more reasonable.

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Soon after Hayden Donahue started to work in Oklahoma, the legislature passed the mental health bill that he, as a consultant, had helped to draft. By establishing a Department of Mental Health with its own governing board and director, Oklahoma had the means to change its barbaric mental health care system.

As the department's first director, Donahue was in position to lead the effort. He had the credentials and experience, but to be effective in designing and implementing a new system, he also would have to be a statesman and work continuously to educate the public and legislators.

Many didn't fully realize that he had been the right man for the job until he resigned in frustration seven years later. Only then did some people notice the accomplishments. As psychiatrist Charles Smith, who served for 15 years on the mental health board, observed: "Progress in mental health back then was measured in inches. The

stigma attached to mental illness was very pervasive in the public's mind. A whole lot of people believed that the mentally ill were permanently possessed by demons. So the attitude was lock 'em up and throw away the key."

In contrast, Smith says, Hayden Donahue believed that all patients should be treated competently and with dignity. That meant a professional staff would have to be acquired. To show good faith, the legislature had increased the department's budget by \$1 million, to \$7 million.

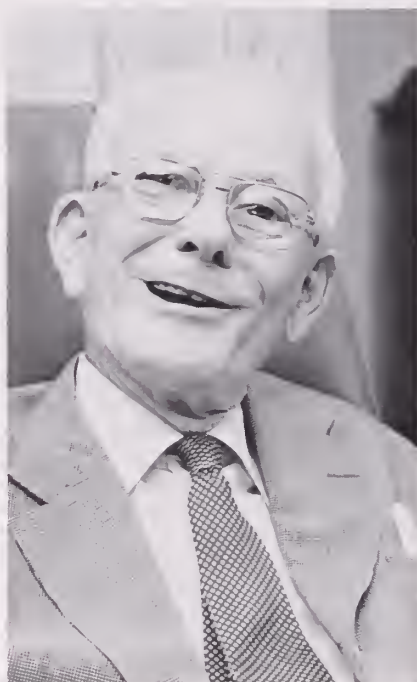
**T**he first year, Donahue hired 40 nurses and such relatively exotic professionals as occupational, music, and recreational therapists. He set up a 240-hour training program for the aides and an additional 160 hours for supervisors, and established psychological testing to help ensure that the employees weren't victimizing the patients with their own psychopathologies.

Donahue's arrival in Oklahoma coincided with that of another pioneering physician, Dr Stewart Wolf, who became chairman of the Department of Medicine at the University of Oklahoma. Together they arranged for residents to begin staffing a medicine and surgery clinic at Central State.

Donahue also cooperated with OU in establishing a nursing program and an internship program for psychologists and social workers.

He established a psychiatric residency program and hired one of his former students, Dr Harold Whitten, to run it. They were able to recruit several top-flight residents and staff psychiatrists almost immediately because Donahue had the right kind of

bait. During that period when Donahue understood that "everyone in the field wanted to be an analyst," he had hired Dr Hugh Galbraith, an analyst trained at the Chicago Institute and a faculty member at Menninger's. Galbraith would teach and provide analysis to any interested resident or staff



physician. "Once this news got out, we had people knocking on our door," Donahue recalls.

Actually, there were 110 applicants for seven first-year residency positions, an incredible ratio given the terrible condition of Central State in 1953.

Recruiting the beginnings of a professional staff was expensive. Other reforms cost relatively little, though they also were essential in modernizing and humanizing the state's system:

- The first children's ward was established.
- The department's 500 tuberculosis patients were rounded up, isolated, and treated.
- Patient abuse was stopped or

curbed through a new penal law that Donahue had pushed for, and he stopped the use of prefrontal lobotomies and punitive electroshock treatments.

• A professionally organized and operated food service program was begun.

After his first year in office, the patient mortality rate declined by 27 percent, and for the first time in history, more patients were discharged than admitted. Most of them were placed with families who had volunteered to care for these discharged patients. Donahue also began working state and national sources for the money to develop community treatment programs.

By this time, Donahue had become an influential member of the American Psychiatric Association. He and a few colleagues in other states began using their influence on the newly established National Institute of Mental Health and on Congress to fund a national community mental health movement.

Momentum for the movement increased after the antipsychotic drug thorazine was approved for use in the mid-1950s. "The results were very dramatic," says Donahue, remembering how many patients, who had been psychotic for years, were freed of crippling hallucinations and delusions after just a week or so of thorazine treatment.

Though the new drugs were not a cure and not every schizophrenic patient responded to them, their availability suggested that patients could be treated with maintenance doses outside the mental hospitals.

The next step was convincing Congress to provide matching funds to establish a nationwide system of community mental health centers. Congressional hearings were held, and the wit-



nesses were a who's who of American psychiatry. Among them were Dr Jack Ewald, departmental chair at Harvard and friend of John F. Kennedy; Dr Dan Blaine, medical director of the American Psychiatric Association; and Dr Hayden Donahue.

By 1959, these men and many others in the mental health field felt that the movement, often called deinstitutionalization by the bureaucrats, was irreversibly in motion. Thousands of patients already had been discharged or were eligible for release. They felt success was near and virtually inevitable.

Meanwhile, Donahue perhaps had become a victim of his own successes in Oklahoma. "After a time," he notes, "the legislature gets to looking at you and says, 'We got you straightened out. Now it's education's turn or somebody else's.' Consequently, I hadn't been getting the funding I needed to upgrade the staffs and buildings at Eastern and Western State hospitals."

As a result, in 1959, Donahue

decided that he might have outlived his usefulness in mental health care in Oklahoma and resigned. He could have tried to bluff or coerce the legislature by threatening to resign, but he didn't consider that an honorable thing to do. Nor would he whine or complain, although he must have felt let down, if not betrayed, by the legislature.

For here was a man who, during his seven years, had received several top administrative awards from the APA, reformed Oklahoma's snake pits, crisscrossed the state to educate the public — even when he knew only a handful of ordinary citizens would attend his presentations — and most assuredly was not enriching himself in the process.

Instead of receiving the support needed to continue mental health reform, especially deinstitutionalization, Donahue was regarded by many as a man who was biting the hand that had fed him.

So that fall, he moved his family back to Little Rock in order to complete the residency training in psy-

chiatry that had been interrupted by World War II. He would also serve as clinical associate professor of psychiatry at the University of Arkansas School of Medicine.

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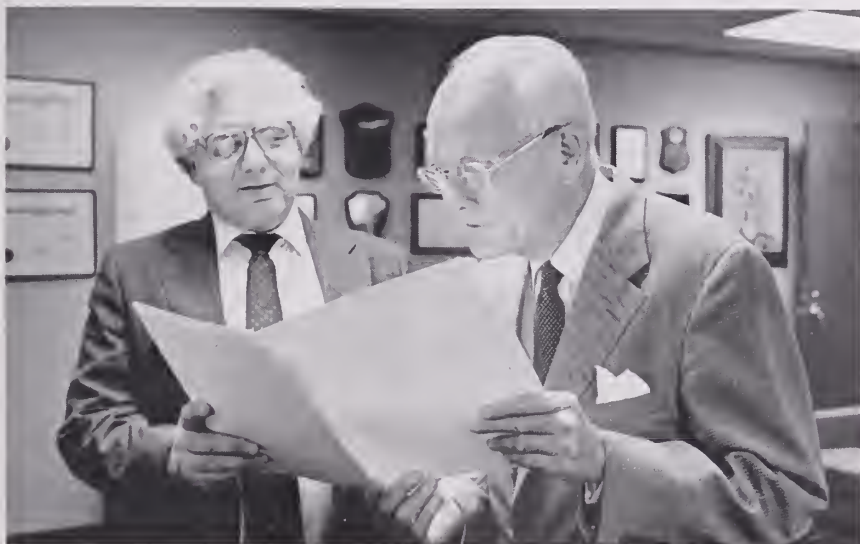
Donahue became board eligible in psychiatry in 1961 and was planning to enter private practice. With three daughters, he had to think about paying their eventual college expenses.

But his plans changed after some of his old Oklahoma friends in mental health and in the legislature asked him to come back. His successor, Dr T. Glen Williams, immediately had gotten crosswise with the legislature, and relations had continued to deteriorate. Not ready to let bygones be bygones, Donahue said he wasn't interested in being state mental health director.

However, he hadn't exactly slammed the door, so they offered to make him superintendent of Central State Hospital only, and they'd thrown in a house for his use. "They didn't have to ask twice," recalls Donahue.

Another factor in his decision involved the precariousness of his eyesight. He had actually been partially blind for 37 days in 1960 following surgery for hereditary cataracts. He had lost the sight in his left eye permanently and though vision returned to his right eye, the prognosis was uncertain. "I wasn't sure about setting up a practice when I had no idea how much longer I'd be able to see. I was frightened. . . ." Then he got the job offer at Central State.

No sooner was he ensconced as superintendent than House Speaker J. D. McCarty was calling to renege on the deal. According



Donahue gives a lot of credit for the progress at Central State to Dr Ernest Shadid, his top assistant there for many years. He says his philosophy of administration is to "hire damn good people, like Ernie, and support them."



In an office lined with plaques, Donahue says this one, the American Psychiatric Association's Distinguished Service Award for lifetime achievement, means the most to him.

to Donahue, he had taken the job with the stipulation that he would never again be mental health director. Yet, the speaker was telling him to write a budget for the mental health department. Donahue refused, saying he wasn't the director. McCarty, who had a knack for getting his way, told Donahue not to give him any trouble "or you'll be the director." Finally, Donahue agreed to write the budget while serving as a consultant to acting director Dr Reba Edwards.

**T**hough he didn't accept the job as mental health director again until 1970, he was the de facto director during much of the 1960s. He and Dr Al Glass, who was director off and on in the sixties, managed to persuade the mental health board and legislature to shut down the "most segregated mental hospital in America," at Taft. All patients and staff there

were black. They were integrated into the other three hospitals, which then had more funding to upgrade their programs.

One of these programs was the continued development of facilities for children. It culminated in 1969 with the completion of a Children's Center (later named after Phil Smalley). According to *Oklahoma Observer* editor Frosty Troy, Donahue had vowed a decade before to build the new center, and its completion was a "monument to his indomitable, tenacious, bull-headed, politicking genius."

To win support for his department, one of Donahue's favorite and most effective tactics, especially in the 1950s and sixties, was inviting public officials to tour the hospitals. During his first gubernatorial campaign in 1961, Henry Bellmon publicly criticized the mental health department's request for a 5 percent budget increase.

"I called him more than once and asked him to come down to Norman and take a look," Donahue says. "Finally, one day Henry called and said he was coming; it was a hot summer day and there was no air conditioning. I marched him through about four wards, and then he said, 'Doc, you're not asking for enough.'"

Another reason Donahue had returned to Oklahoma was to play a role in the development of community mental health centers both nationally and in Oklahoma. With the active support of President John F. Kennedy, Congress in 1963 passed a bill calling for a national system of comprehensive community mental health centers. Just what these centers were to include was somewhat unclear pending results of various federally funded pilot projects. Donahue made many trips to Washington and other cities to, among other things, "steal the best ideas" for



inclusion in his grant proposal to the National Institute of Mental Health.

As a result of his diligence and good timing, the nation's first federally funded comprehensive center was built in Norman in 1968. And within a year, Donahue was presiding over the transition in the state's mental health care system. Director Al Glass had resigned to take over the Illinois mental health department.

**W**ithin a decade, the community mental health movement was in high gear. Aside from the three state mental hospitals, there were three state-run community mental health centers and five that were partially state supported, plus 33 satellite programs and 42 alcohol and drug treatment programs. This system reduced the average patient stay at Central State to 25 days in 1978, compared with eight to ten years in 1958.

The total census of the department's hospitals had been reduced from 8,620 in 1953 to about 3,000, but this hadn't been accomplished without dissent. Furthermore, Donahue became the target of some legislators who felt that the hospitals were being victimized by the community-based movement. This led to a call for a legislative investigation almost every time a patient complained. While Donahue supported many of the probes that he thought were justified, he also believed that some of the charges, in effect, were attacks directed at him.

He wasn't thin-skinned, but at age 65, he was tired. And getting adequate financing for the community mental health centers would require a tremendous amount of energy and work.

"I thought Oklahomans would support us if we could get our message out," he recalls, "but I just didn't have the energy, like I used to, to get in my car and head out to speak anywhere that I could draw a crowd."

In 1978, he resigned as state mental health director but remained as superintendent at Central State for another year. To show the appreciation of Oklahomans for his service, the legislature unanimously passed a bill creating the Hayden H. Donahue Mental Health Institute, which would comprise all Norman mental health facilities, including the former "snake pit" and the first community mental health center in the nation.

At dedication ceremonies on December 2, 1978, Congressional leader Carl Albert said, "This is a great institution, but to build a building to reflect the character of the man, you would have to build it bigger than the Empire State Building."

Oklahoma Senator Gene Stipe,

who originally helped to recruit Donahue to Oklahoma, said Donahue educated the entire state, including the legislature, on the importance of community treatment. "Thousands of lives have been made fuller because he chose the profession he did."

Dr Charles Smith spoke with eloquence and passion. Smith had been one of Oklahoma's first psychiatric residents in 1955 and had been a member of the mental health board for several years. About Donahue he said, "To see him with patients on the wards, you know he has a driving compulsion to treat the mentally ill with love and compassion. . . . His professional career exemplifies that it is more blessed to give than to receive."

Another board member, Ruth Sutherland, presented Donahue with a plaque listing all the facilities of the new institute and said, "He's already a director. Now he's an institution."

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(continued)

**A**lthough he has devoted a good part of his life to improving the care and treatment of Oklahoma's mentally ill, Hayden Donahue has been equally active on the national scene. He has served as president of the American College of Psychiatrists, treasurer and trustee of the American Psychiatric Association (APA), and president of the American Association of Psychiatric Administrators.

He also has been on the administrative board of the National Association of Mental Health Program Directors and a member of both the National Advisory Committee to the

White House Conference on Aging and the American Bar Association's National Commission on the Rights of the Mentally Disabled.

In addition, Dr Donahue has served as treasurer and member of the board of directors for the Pan American Training Exchange in Psychiatry, APA representative to the World Health Organization's Latin American Conference on Mental Health, and consultant to the National Institute of Mental Health, the US Marine Corps in Vietnam, and the governor and legislature of the State of Nebraska.

That plaque today is one among dozens of framed awards on the walls of Donahue's office at Central State. Many others are stacked up here and there. Though there is still wall space remaining in his large office, Donahue says he "lost interest" in putting them up. "Too bad all these things aren't money," he says, smiling and gesturing at the awards.

Actually, making money was never a priority with Donahue, says Smith, who is now chief of staff at Oklahoma City's Veterans Administration Medical Center. "That's one reason the legislators trusted him . . . because it was obvious he was devoted to the cause of mental health. He took nothing for himself."

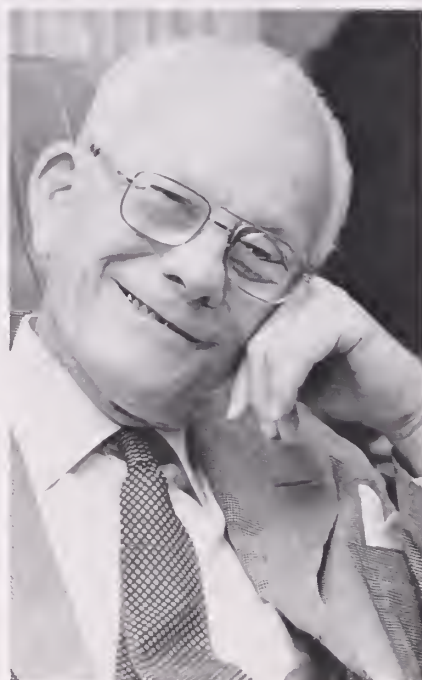
Though Donahue is now 75 and slowed by hypertension and back problems, the job given to him nearly a decade ago by the new mental health director, Dr. J. Frank James, is not honorary. As the director of the Oklahoma Institute for Mental Health Education and Training, he teaches and consults in the residency program at Central State Hospital and conducts training programs on special topics at other hospitals and centers. He also brings national experts in mental health to Norman to present day-long seminars.

"They come because I used to be treasurer of the APA and appointed them to choice committees, and now that they are the wheels, they owe me," Donahue says, smiling.

Incidentally, he notes, of all the awards he has received, the most meaningful one is the Distinguished Service Award from the APA. Though it was presented to him in 1984, it is for lifetime achievement and is usually bestowed on only one individual an-

nually. He joined "a pretty good crowd" of recipients, including Karl Menninger and Anna Freud.

Though Donahue he says he thinks the future of community mental health in Oklahoma is good, he spends the next few minutes explaining that the more



things change, the more they stay the same.

"Frank James faces the same problems today that I did during my time," he points out. "Lack of trained people and money. We need mobile teams out in the communities to deal with emergencies, and we need many more caseworkers. If we don't get more trained people out in the community, we may see more patients back in the mental hospitals."

"We may have to develop colonies with sheltered workshops for the mentally ill who don't need to be hospitalized but can't make it in the community. I had one once in Lexington, but Governor Hall needed the building for prisoners."

"We should be taking a critical

look at halfway houses. I argued for them back in the 1970s, and now we have several. But you know, those places have turned out to have revolving doors, and you have to wonder, halfway to what?"

Dr. Ernest Shadid, whose office adjoins Donahue's, comes in to remind Donahue of a speaking engagement. Later, Donahue says that Shadid, who was his top assistant for many years at Central State, deserves a lot of the credit for the improvements and innovations there. "My philosophy of administration is you hire damn good people, like Ernie, and support them. I never meddled in their business, and I tried to keep other people off their backs."

Oklahoma has trouble recruiting good people, Donahue says, because of a somewhat "negativistic attitude. That may be why the psychiatry department at OU's medical school hasn't had a full-time chairman in two years. I've been over a good part of the world and I have seen why many countries have a reason to feel negativistic about their present state and chances for the future. I can't explain why Oklahomans feel that way. When you look closely, you find that Oklahoma has unlimited assets and the potential for a great future. But maybe I'm blinded by my love for this state and its people."

*Richard Green is an experienced medical writer and former editor of Vital Signs, magazine of the University of Oklahoma Health Sciences Center and OU College of Medicine Alumni Association.*

*Jim Thomas is a staff photographer for Vital Signs.*



# Prevention of HIV Infection

John R. Harkess, MD, and Gregory R. Istre, MD

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*This article presents a summary of recommendations for prevention of HIV infection through sex, drug use, and perinatal exposure. Prevention of HIV infection in the health-care setting was addressed in last month's AIDS Update.*

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Since no vaccine or curative therapies yet exist for human immunodeficiency virus (HIV) infection, current strategies to combat the epidemic of acquired immune deficiency syndrome (AIDS) and HIV infection must focus on prevention. Although a small proportion of AIDS cases (3%) have acquired infection from infusion of contaminated blood products, those modes of transmission have been largely eliminated by deferral of high-risk donors and the exclusion of all blood products that test positive for antibodies to HIV. Current prevention efforts must be aimed at reducing spread of HIV by modifying or eliminating the behaviors that transmit the infection from person to person. In addition to mastering the new body of knowledge concerning AIDS diagnosis and treatment, it is fast becoming necessary that health-care providers be prepared to initiate discussions concerning sexual behavior, drug use, and ways to prevent HIV transmission with all of their patients who may be at risk. This article will summarize those prevention strategies (Table).

From the Epidemiology Service, Oklahoma State Department of Health, Oklahoma City, Oklahoma.

## Prevention of Sexual Transmission

Sexual transmission of HIV can be prevented by avoiding contact, particularly mucous membrane contact, with blood, semen, or vaginal secretions of persons who are infected with HIV. Vaginal, rectal, or oral sex with an infected person carries a risk of HIV transmission. Because of the long latent phase of HIV infection, it may not be possible to know if a sexual partner is infected with HIV. The risk of sexual transmission can be eliminated by abstaining from insertive sexual practices altogether, or by maintaining an exclusive or mutually faithful (monogamous) sexual relationship with one person, provided that neither person is infected with HIV. The latter is assured for couples who have no other risk of infection and have maintained a mutually monogamous sexual relationship since 1978, when the HIV epidemic first began in this country. It can also be assured for couples shown to be free of infection by serologic testing, within the limits of the laboratory tests. Avoiding sexual relationships with persons who are at greater risk for being infected with HIV (such as homosexual or bisexual men or intravenous drug users) and decreasing the number of sexual partners can reduce the possibility of coming into contact with an infected person.

However, these recommendations have limitations. Total abstinence from sexual relationships is not a realistic expectation for most adults. Persons who attempt to remain celibate often do so out of

fear and may find themselves engaging in unplanned high-risk sexual encounters. Recommendations to avoid having sex with persons at increased risk of being infected with HIV may not be practical for homosexual men who wish to have sex with other homosexual men, or for persons who are in a marital or committed relationship with a person at increased risk, such as the spouse of an IV drug user. Lastly, despite being informed about the risks of AIDS and HIV infection, some will still be unwilling to alter their high-risk behaviors. Alternative methods of prevention must be available.

"Safer sex" is sexual activity in which there is no exchange of potentially infectious "body fluids" (meaning semen, vaginal secretions, and blood). Some examples of safer sex are kissing, caressing, genital manipulation, shared masturbation, or insertive sexual intercourse using condoms. Condoms have been shown to be an effective barrier to HIV in the laboratory and have been effective (although less than 100%) in the prevention of other sexually transmitted disease. Vaginal, rectal, and oral sex, if practiced with condoms on every occasion and from start to finish, should substantially reduce the chance of HIV transmission. Nonoxynol-9 – containing spermicides, which have been shown to inactivate HIV under laboratory conditions, may provide additional protection when used in concert with condoms.

### Prevention of Parenteral Transmission Among Drug Users

The primary focus of preventing parenteral transmission of HIV should be to help stop people from beginning to use drugs and to help those who already use drugs to quit. This is good prevention not only of HIV infection, but also of an array of other health and social problems. However, preventing drug use and helping those who are addicted has proven difficult. The shortage of drug treatment facilities in some areas of the country has made help more difficult to find for many addicts.

If persons who inject drugs were to stop sharing unsterilized needles and syringes, parenteral transmission of HIV among drug users could be eliminated. For persons who cannot stop using drugs, prevention efforts should encourage users not to share any part of their injection apparatus ("rigs" or "works") or to disinfect them with 10% diluted bleach solution or alcohol, or by boiling. If bleach or alcohol are used, the equipment should be thoroughly rinsed.

Educational efforts directed toward adolescents, particularly in areas where drug use is prevalent, need to emphasize both not using drugs and avoidance of needle- and syringe-sharing for anyone who does use drugs. However, even persons who practice careful aseptic technique while injecting drugs may still be put into high-risk situations for both sexual and parenteral transmission of HIV as a result of their dependency and impaired judgment while using drugs. Stopping drug use is the best prevention.

### Prevention of Perinatal Transmission

Mother-to-infant transmission of HIV can be prevented only by preventing HIV infection among women and by counseling women who are infected to avoid pregnancy. Since the prevalence of HIV infection among women is low in most areas, counseling and testing efforts should be directed toward women with risk factors for having HIV infection (IV drug use, prostitution, multiple sexually transmitted diseases, etc). Risk assessment, coupled with counseling and HIV testing for those at increased risk, needs to be available in family planning clinics, prenatal clinics, and other health-care settings.

### Conclusion

If AIDS prevention education is to be successful, it

#### Prevention of HIV Infection

##### Sexual transmission

- Limit your number of sexual partners, preferably to one person. Both partners remain monogamous.
- Know your partner. Avoid having sex with anyone who is at risk of being infected with HIV, such as an intravenous drug user, homosexual or bisexual man, anyone who has had multiple partners, prostitutes, etc.
- For sexual intercourse with someone who could be infected, practice "safer sex." This includes the use of condoms for intercourse, from start to finish.

##### Parenteral transmission

- Do not use illicit drugs.
- If you do, then don't use needles to inject drugs.
- If you do use needles, then don't use needles or syringes that have been used by someone else.
- If you use someone else's needle or syringe, clean it with diluted bleach, alcohol, or by boiling in water.

##### Perinatal transmission

- Women at risk for HIV infection should be counseled and offered HIV testing before becoming pregnant.
- Women who are infected with HIV should avoid becoming pregnant.



must reach the persons who are at risk, it must be in a form that can be understood, and the recommendations themselves must be perceived as practical. The content of the AIDS prevention education that public health agencies, schools, and other institutions provide has been a controversial topic. Explicit instruction on safer sex and the sterilization of needles and syringes has come under criticism as encouraging sexual promiscuity, homosexuality, and intravenous drug use. Much of what has been published has used technical language such as "body fluids," which may not be understood by many of those at greatest risk of infection.

Although the use of condoms has increased in some selected populations, they are still used infrequently, particularly among heterosexuals. The sterile clinical descriptions of safer sex practices have contributed to the perception of them as unsatisfying. Explicit illustrated descriptions of safer sex practices and attempts to make safer sex more appealing may be necessary to help change attitudes and increase the acceptance of these AIDS prevention measures among persons at risk for HIV infection.

While AIDS prevention is becoming a part of many national and community educational campaigns, the role of physicians and other health-care professionals in providing and encouraging good AIDS prevention is critical. The one-on-one counseling that can occur during a doctor-patient encounter will play a major role in preventing further spread of HIV infection. □

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#### Coming in November

Among the manuscripts being considered for publication in November are an update on Reye syndrome, reports on both perinatal lawsuits in Oklahoma and the immune therapy of cancer, and a case report on foreign body embolism.

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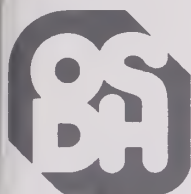
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## News from the Oklahoma State Department of Health

### Handling Blood and Body Fluids in Your Clinical Laboratory

Blood and certain body fluids of all patients are considered potentially infectious for human immunodeficiency virus (HIV), hepatitis B virus (HBV), and other bloodborne pathogens. Precautions should be exercised to prevent parenteral, mucous membrane, and nonintact skin exposure.


Although blood and other bloodborne pathogens are the most important sources of HIV and HBV, precautions also apply to semen and vaginal secretions, cerebrospinal fluid, synovial fluid, pleural fluid, peritoneal fluid, pericardial fluid, and amniotic fluid. Feces, nasal secretions, sputum, sweat, tears, urine, and vomitus represent a potential source of nonbloodborne pathogens, and precautions should be utilized.

Protective barriers such as gloves, gowns, masks, and protective eyewear will reduce exposure to these fluids. Medical gloves such as sterile surgical, or

nonsterile vinyl or latex examination gloves are acceptable. General purpose rubber gloves may be used for housekeeping, instrument cleaning, and decontamination procedures. Additional precautions must be observed to prevent penetrating injuries from needles or sharp instruments.

When collecting a specimen, avoid contaminating the outside of the specimen container and the laboratory form. Ship and pack specimen in a well-constructed container with a secure lid to prevent leakage during transport. For routine procedures, a biological safety cabinet is not necessary.

Mouth pipetting is not safe. Hands, skin surface, or gloves should be washed immediately if contaminated, and work surfaces should be decontaminated with an appropriate chemical germicide. Scientific equipment should be decontaminated and cleaned before repair, and contaminated materials used in testing should be decontaminated before disposal. All persons should wash their hands after completing laboratory activities, and should remove protective clothing before leaving the laboratory.

These simple and practical precautions can protect people in the health-care setting. Implementation of universal blood and body fluid precautions for all patients eliminates the need for warning labels on specimens since blood and other body fluids from all patients should be considered infective. 

DISEASE	July 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	0	7	7
CAMPYLOBACTER INFECTIONS	20	97	129	135
ENCEPHALITIS, INFECTIOUS	0	4	12	16
GIARDIA INFECTIONS	11	80	95	113
GONORRHEA (Use ODH Form 228)	603	4174	5926	7148
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	12	117	94	112
HEPATITIS A	33	278	158	233
HEPATITIS B	17	103	144	130
HEPATITIS, NON-A-NON-B	4	27	24	32
HEPATITIS UNSPECIFIED	1	19	19	56
MEASLES (RUBEOLA)	0	8	3	10
MENINGITIS, ASEPTIC	10	28	92	88
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	3	11	22	36
MENINGOCOCCAL INFECTIONS	1	13	16	21
PERTUSSIS	3	27	67	116
RABIES (Animal)	2	24	25	58
ROCKY MOUNTAIN SPOTTED FEVER	23	55	57	88
RUBELLA	0	1	5	1
SALMONELLA INFECTIONS	54	189	205	227
SHIGELLA INFECTIONS	23	83	93	106
SYPHILIS (Use ODH Form 228)	8	93	92	110
TETANUS	0	0	1	1
TUBERCULOSIS	39	142	139	141
TULAREMIA	1	9	16	13
TYPHOID FEVER	0	0	2	2
MUMPS	14	166	total to date	

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	81
BRUCELLOSIS	1
LEGIONNAIRES' DISEASE	6
MALARIA	7
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	6

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## *Medical records sought*

### **State Bureau of Investigation needs help from local doctors**

The Oklahoma State Bureau of Investigation (OSBI) is hoping that state physicians can help solve a mystery.

The bureau is attempting to identify some human remains and wants to compare them with any medical or dental records or x-rays for the following person, reported missing on June 6, 1983:

Hollis Laverne Dykes, aka, Howard Rogers. A white male born November 9, 1933, or November 9, 1934, or November 14, 1933. Social security number: 554-42-0661. Last known address: Elk City, Oklahoma. Occupation: truck driver. Known to have resided: Elk City, Oklahoma; Las Vegas, Nevada;

around the Los Angeles, California, area; Nebraska; and unknown other places.

A medical release is available, signed by Hollis Dyke's son, who was legally appointed in Oklahoma to handle Dyke's affairs.

Anyone having information or records on this individual is asked to contact OSBI Agent James E. Otte, 125 West 15th Street, Suite 100, Tulsa, OK 74119, (918) 582-9075, or the Tulsa Medical Examiner's Office, 1115 West 17th Street, Tulsa, OK 74107, (918) 582-0985.

Any assistance will be greatly appreciated.



### **Trustees name six Life Members at August board meeting in OKC**

Six new Life Members of the Oklahoma State Medical Association have been approved by the OSMA Board of Trustees.

At its August 21 meeting in Oklahoma City, the board endorsed Life Memberships for the following applicants:

Frank H. Austin, MD; William A. Matthey, MD; and Melton P. Meek, MD, Lawton;

Glenn W. Cosby, MD, Miami; F. Paul Kosbab, MD, Tulsa; and Floyd Simon, MD, Clinton.

Any OSMA member in good standing is eligible for Life Membership by meeting one or more of the following qualifications: (a) retired from the active practice of medicine due to ill health or age, (b) engaged in the active practice of medicine for fifty years or more, or (c) attained the age of seventy years.



**James W. Loy**, administrator of the Southern Plains Medical Center in Chickasha, receives the first Donald J. Blair Friend of Medicine Award. Presenting the award at the August OSMA Board of Trustees meeting is Mr Blair's widow, Jan; with her are daughters Linda and Betsy.



**At the OSMA Board of Trustees meeting** in August, several awards were presented. (Above) George W. Prothro, MD, (l) Tulsa, receives the A.H. Robins Award from Damon L. Williams, Robins representative, after being introduced by Michael J. Haugh, MD, (c) Tulsa, former chairman of the OSMA board. The



award is for outstanding service to one's community and profession. (Right) OSMA Executive David Bickham presents the 1987 Outstanding Layman Award to Oklahoma City attorney Lawrence Rember, former director of the University of Oklahoma College of Medicine Alumni Association.

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## Registered care technologists get AMA delegates' attention

More than 400 delegates, including the Oklahoma contingent, attended the American Medical Association's Annual Meeting in Chicago this summer.

The most controversial item of business on their agenda proved to be the AMA Board of Trustees report proposing the creation of registered care technologists (RCTs). The employment of RCTs, described as bedside caregivers who would execute physicians' orders at the direction of a head nurse, was suggested as a solution to the nation's shortage of trained nurses.

The House of Delegates amended the report to require certification and registration of RCTs, rather than licensure, and referred it to the Board of Trustees for action.

In other action, the house

- Approved a report calling for significant reform in the Medicaid program;
- Recommended creation of a task force to study the problem of indigent health care;
- Adopted a major report on drug abuse that recommended the federal government redirect its efforts from eliminating the supply of drugs to curbing demand through education and treatment;
- Asked states to give serious consideration to implementing contact tracing and counseling for HIV-positive persons and their contacts, with adequate safeguards to protect confidentiality;
- Asked the AMA to seek repeal of the maximum allowable actual charge (MAAC) concept;
- Recommended the AMA seek legislative relief including repeal of Medicare's medically unnecessary provision (Ten resolutions, including one from Oklahoma, addressed this issue. The final language in the consolidated resolution was very similar to Oklahoma's original resolution.);
- Adopted a report that said legal risks for physicians who are involved in peer review are minimal as long as the review is conducted in good faith, with proper procedures;
- Called for elimination of smoking on all domestic airline flights;
- Opposed the introduction of smokeless cigarettes; and
- Granted representation in the AMA House of Delegates to the American Medical Society on Alcoholism and Other Drug Dependencies and the American College of Utilization Review Physicians.

### DEA publication

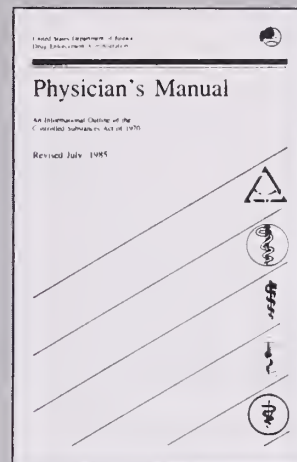
## OSMA offering free booklet on Controlled Substances Act

The *Physician's Manual*, a publication of the US Department of Justice Drug Enforcement Agency (DEA), is now available free of charge from the Oklahoma State Medical Association.

The 40-page booklet is designed to assist physicians in their understanding of the Controlled Substances Act of 1970 and its implementing regulations as they pertain to medical practitioners.

Included are sections on record keeping and inventory requirements, tips and guidelines for prescribers of controlled substances, registration, security, drug theft, and prescription orders.

To obtain a copy of the publication, contact the OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118, (405) 751-8597 or 1-800-522-9452.



Also at the Chicago meeting, new AMA president James A. Davis, MD, a surgeon from Durham, NC, was installed. Alan R. Nelson, MD, a Salt Lake City internist-endocrinologist, is the new president-elect.

Members of the Oklahoma delegation to the AMA are Ray V. McIntyre, MD, Kingfisher; M. Joe Crosthwait, MD, Midwest City; Floyd F. Miller, MD, and Victor L. Robards, Jr., MD, Tulsa; Ed L. Calhoon, MD, Beaver; Perry A. Lambird, MD, and James B. Eskridge III, MD, Oklahoma City; and Orange M. Welborn, MD, Ada.

Alternate delegates are John R. Alexander, MD, Michael J. Haugh, MD, and George H. Kamp, MD, Tulsa; William O. Coleman, MD, Gary F. Strebel, MD, and James B. Pitts, MD, Oklahoma City; and John A. McIntyre, MD, Enid.

# Picnic '88: Burgers in the board room



The sky was black as heavy rain, driven by high winds, lashed the dry grass. Normally such a storm would have been welcome in Oklahoma City. But at OSMA headquarters, at 4:30 PM on August 19, it was not; the annual OSMA medical student picnic was to begin on the front lawn in just one hour.

Fortunately, however, with the help of some tightly crossed fingers, Oklahoma's quick-change weather ran true to form. By the time the guests arrived, the storm front had passed, leaving behind an intermittent drizzle that couldn't dampen the spirits of some 175 determined picnickers.

Tables and chairs on the lawn were soaked, so the building's doors were thrown open; a friendly, brightly lit interior contrasted sharply with the gloomy skies outside. Still, the front portico remained the center of activity until dinner was served. Then, with dry seating a necessity, picnickers began to move indoors.

Juggling paper plates heaped with traditional picnic fare, they fanned out through the building, establishing enclaves in the board room, conference room, and kitchen, and in several offices. Children settled on the floor; a lucky few commandeered seats behind executive desks or at the switchboard.

Burgers, babies, and bermudas in the board room? It did seem a bit incongruous, but that's the way things worked out at this year's picnic. Maybe that's why it was so much fun. □



Jeff Reames, MS IV (above), president of the OU medical students association, addresses the guests. Behind him is OSMA President Ray V. McIntyre, MD. (Right) Among those settled in the conference room are Dr LeRoy Young; Nancy K. Hall, PhD, associate dean; and guest Ed Collins.







In the board room, Kelton Oliver, MS II, Oklahoma City, (c) talks with Michael "Mikki" Ratzlaff, MS II, from Corn, Okla. (Far left) Susan Massara, coordinator for admissions and student affairs, arrives.



(Right) Aaron Boyd, MS I, Lawton, at the head of the table, and Susanne Stickler, MS I (r), Emmett, Idaho, enjoy being part of the kitchen crowd.



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## DEATHS

**Luther Harrison Becker, MD**  
**1897 - 1988**

OSMA Life Member L. Harrison Becker, MD, Blackwell, died August 9, 1988. A retired general practitioner, Dr Becker was born in Kansas and graduated from the University of Kansas School of Medicine in 1926. He established a private practice in Blackwell a few months later. Dr Becker served with the US Army Medical Corps during World War I.

**John Ralph Rafter, MD**  
**1912 - 1988**

Retired Muskogee radiologist John R. Rafter, MD, died August 1, 1988. Dr Rafter, a native of Huntsville, Mo, was graduated from Creighton University School of Medicine, Omaha, Neb, in 1938. Later that year he established a private practice in Muskogee, and during World War II he served in the US Army Medical Corps. Dr Rafter retired from private practice in 1973. □

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## BOOK SHOP

**Truants: The Story of Some Who Deserted Medicine Yet Triumphed.** By Lord Moynihan. London: Keynes Press for the British Medical Association, 1983 (First published in 1936 by Cambridge University Press), pp 73, price not given.

Lord Berkeley Moynihan was born on October 2, 1865, and died in 1936. A distinguished surgeon during the early part of the twentieth century, who worked primarily at Leeds, he was also a renowned orator, wrote extensively about abdominal surgery, and became president of the Royal College of Surgeons. He received numerous honorary degrees and was inducted into many medical societies.

This small monograph, *Truants*, is expanded from the Linacre Lecture given by Moynihan at Cambridge in 1936. The word *truants* is applied to persons in the medical profession who made impor-

tant contributions in disciplines other than medicine. In the lecture, Moynihan mentioned 95 persons, 83 of whom were selected to be included in this book. The majority are British subjects. Some of the better known include Edward Jenner, discoverer



of vaccination, who made many contributions to ornithology; Johann C.F. Schiller, poet; Peter M. Roget, who, after retirement from practice, compiled the *Thesaurus of English Words and Phrases*; and Conan Doyle, creator of Sherlock Holmes. Americans include Oliver Wendell Holmes, Leonard Wood, and Silas Weir Mitchell.

Among the most remarkable truants were the first cousins Alexander Macalister (1844-1919) and Donald Macalister (1854-1934). Both were famous for their profound, varied, and encyclopedic knowledge. Donald Macalister spoke 12 languages, most of them fluently, and served as principal and vice-chancellor of Glasgow University, president of the General Medical Council, and chancellor of the university. Alexander Macalister was proficient in 14 languages. He was professor of anatomy in the University of Cambridge for over 30 years. He was also a philosopher, an archaeologist of note, and a skilled artist.

The descriptions of each person's work are pertinent, pithy, and emphasize their achievements. The disciplines represented include politics and government service, law, literature, geographic exploration, astronomy, geology, chemistry, and others.

This small book condenses an enormous amount of research into a few pages. It is fascinating reading.

—Harris D. Riley, Jr., MD  
Oklahoma City

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**Dandy of Johns Hopkins** (Sponsored by Congress of Neurological Surgeons). By William Lloyd Fox. Baltimore: William & Williams Co., 1984, pp 293, 57 illus., \$20.00.

Walter E. Dandy, a physician associated with Johns Hopkins University, greatly influenced neu-

rological surgery in the first half of the twentieth century. When I went to Baltimore as a house officer, Dandy had been dead for two years; however, stories about him were still numerous.

Dandy was born in Sedalia, Missouri, in 1886, was graduated from the University of Missouri, and began medical school there but transferred to Johns Hopkins in the fall of 1907 as a second-year student. He remained associated with Johns Hopkins for the remainder of his career.

Dandy's career in neurosurgery began in 1910, when he was appointed instructor in the Hunterian laboratory under the direction of Harvey Cushing. He subsequently entered the regular surgical service of the Johns Hopkins hospital as one of Cushing's assistant residents. Soon thereafter, a well-known and essentially permanent conflict developed between these two strong-willed, ambitious men. Cushing left Johns Hopkins in 1912 for Boston to become, as he is often described, "the father of American neurosurgery." Dandy remained at Johns Hopkins, became experienced in general surgery, developed a nationally known neurosurgical

program, and made many substantial contributions to this field.

Dandy's first research accomplishment was with pediatrician Kenneth Blackfan in studies of hydrocephalus in children. He introduced ventriculography, the first means of localizing intracranial masses. He also established the first postoperative recovery room and contributed to our knowledge of trigeminal neuralgia. He had an enormous practice.

Fox has used personal interviews with the Dandy family and with many persons who knew Walter Dandy. Fox had access to Dandy's personal and professional correspondence and has obviously studied many of Dandy's publications.

In a readable fashion the author has presented Dandy, his marriage and family relationships, and his achievements in research and in clinical practice. Photographs show Dandy at work, in social settings, and with his family. There are listings of his residents, staff members, and contemporaries; examples of his operative notes; and a complete bibliography of his publications.

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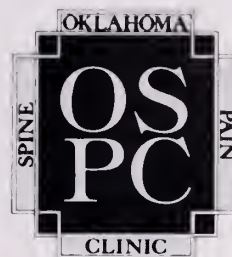
Although this volume tells much about Dr Dandy, it seems somewhat superficial in its treatment of Dandy's character and personality and the forces which compelled him to function as he did, at least based on the stories that I heard about him from those who knew him well. Nevertheless, it is a readable and interesting review of one of the pioneers of American neurosurgery.

—Harris D. Riley, Jr., MD  
Oklahoma City



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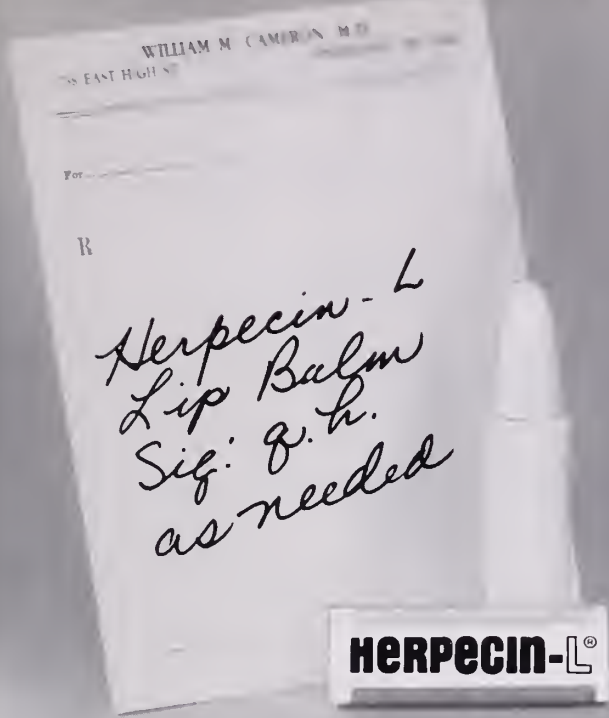
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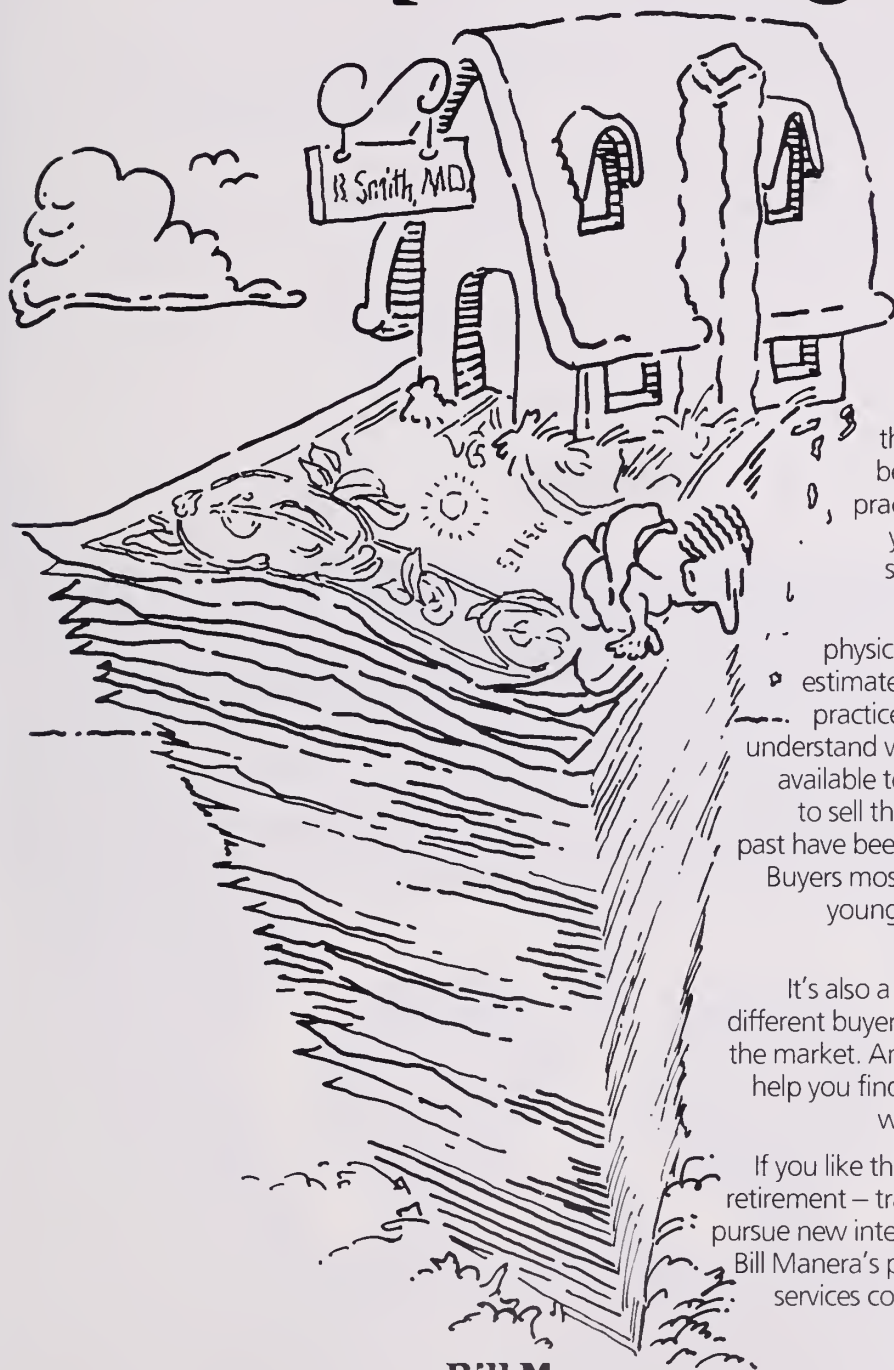


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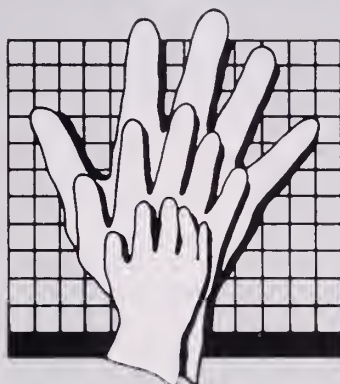
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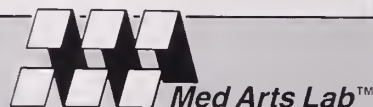
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### Contributions

Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

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## AUXILIARY

The Oklahoma State Medical Association Auxiliary has successfully launched the 1988-89 year with the Membership Team Meeting on July 20th. Twenty-two state and county leaders attended the meeting and luncheon held at the OSMA office. Mary Ann Deen, Oklahoma auxilian and the American Medical Association Auxiliary Membership Committee chairman, led much of the discussion of the day as ideas and enthusiasm were shared by all. The meeting set the stage for an exciting year and proved to be a successful forum for formulating this year's goal of working on both the quality and quantity of membership.

Membership in the OSMAA is a privilege shared by nearly 1300 auxilians in our state. More physician spouses are eligible for membership in the state auxiliary, with the only requirement being that the person is a spouse of a physician who is a member of their county medical society and of the OSMA. The OSMAA offers the opportunity to be informed on legislation on both the state and national level as well as to become involved in the legislative process that is affecting the current practice of medicine. The OSMAA offers the chance to affect the future of medicine through the auxiliary's fundraising assistance to medical students and medical schools through the American Medical Association Education and Research Foundation. The OSMAA offers the opportunity to educate an individual's community on current health issues and to help promote quality health care through the exciting health projects that are directed both on a state and a county basis. The OSMAA also offers the chance to grow as a person, to serve as an integral part of a community's medical family, and to have fun meeting and getting to know other auxilians from across the state. Auxilians are a talented, resourceful, and exciting group of which to be a part.

The membership goal this year is to reach potential members and to continue to provide a quality organization for current members. To obtain these goals, each auxilian needs to give his or her input to the county and state auxiliaries so that individual needs will be met and so that the vital concerns of the group can collectively be addressed. Members who have no organized county auxiliary are placed in the member-at-large category. Last year, these members-at-large were encouraged to participate in the nearest county auxiliary. This idea will be promoted again this year as it allows these members

the support and friendships that the auxiliary provides. This is just one of the ways the auxiliary is working to provide quality of membership. Another way in which the auxiliary strives for quality in its organization is through the programs and topics that are presented at confluence and convention, and in the projects that are selected and developed. Projects and programs such as the AIDS Town Hall, Medi-File, and the Drunk Driving Campaign have helped to make an impact in various communities across the state. Seminars such as those dealing with stress management in the medical family have helped auxilians in their daily living. The OSMAA will continue this type of quality programming for its membership.

The OSMAA is the only organization that addresses specific concerns and problems unique to the medical family. It is an organization that provides peer support, personal development, and a unified voice on medical issues and legislation. The auxiliary is your organization and its most important asset is YOU! If you are not currently a member or if you know of someone who would like to join, please use the form below. For those of you who are members, welcome to the start of another exciting auxiliary year!



Please fill in and mail to:

OSMA, c/o Ginny Morris or Susan Paddock, 601 NW Expressway, Oklahoma City, OK 73118

Name \_\_\_\_\_

Physician's Name \_\_\_\_\_

Home Address \_\_\_\_\_

Home Telephone \_\_\_\_\_

☐ I would like to join auxiliary.

☐ I am interested in receiving more information about auxiliary.

☐ My name is listed above and I am in auxiliary. However, the person listed below is someone I know that would like to be a member and receive more information on auxiliary.

Name \_\_\_\_\_

Physician's Name \_\_\_\_\_

Home Address \_\_\_\_\_

Home Telephone \_\_\_\_\_

## THE LAST WORD

■ **State physicians are being asked to help the** Oklahoma State Medical Association (OSMA) determine the number of Medicare payments being denied for alleged lack of medical necessity. OSMA President Ray V. McIntyre, MD, is asking all physicians to send copies of denial notices they've received or comments on medical necessity problems they've experienced to the OSMA, 601 Northwest Expressway, Oklahoma City, OK 73118.

■ **A noninvasive vascular technology update** will be presented by HCA Presbyterian Hospital, Oklahoma City, on Friday, December 2, 1988. The one-day seminar is designed for physicians and technologists who want to learn more about the most recent advances in this type of vascular disease diagnosis. For more information, contact Kathy Hampton, (405) 271-6447.

■ **Tulsans Christopher Gifford, MD, and David S. Hurewitz, MD,** have received the George W. Prothro Award for Distinguished Community Service. The award is the highest honor given by the American Lung Association of Green Country Oklahoma. The two physicians helped establish a summer camp for asthmatic children, which they continue to support. They also served on the ALAGCO board of directors and were among the founders of ALAGCO's annual Family Asthma Workshop.

■ **A 1989 dues increase was approved by the** American Medical Association House of Delegates in June. The \$25 increase, from \$375 to \$400, will apply to most member physicians. However, because Oklahoma is a unified state, its physicians receive a 10% reduction, bringing their dues to \$360. No dues increases are planned for medical students or resident physicians.

■ **Prime Insurance Company, which may also** be operating under the name CARIB, is *not* authorized to sell insurance in Oklahoma, warns State Insurance Commissioner Gerald Grimes. The company sells medical malpractice insurance and reportedly has solicited hospitals and doctors. Solicitations frequently list a Chicago mailing address, although the company is believed to be based in the British West Indies. Anyone approached by Prime or CARIB is urged to contact the commissioner's office, (405) 521-2828.

■ **October has been designated Talk About Prescriptions Month** by the National Council on Patient Information and Education (NCPIE). The theme of this year's campaign is "Communicate Before You Medicate" and is directed toward health care professionals and organizations. In its effort to stop the nation's "other" drug problem, prescription medicine misuse, NCPIE is encouraging communication with patients every time a medication is prescribed and dispensed. Consumers, in turn, are being urged to speak up and ask questions about all the medicines they take.

■ **PLICO, the Physicians Liability Insurance** Company, is offering two new audio cassette tapes, bringing to five the number of tapes available. Tape 4 is an hour-long listing of actions and liability situations by Bill Gingsburg, MD, JD. Tape 5 is a recording of "Listening: A Loss Prevention Tool," a presentation by OSMA General Counsel Ed Kelsay. The tapes are available free of charge from the Oklahoma State Medical Association; physicians are urged, however, to share the tapes with colleagues, office staff, etc.

■ **The Unisys Corporation, which processes** Medicaid claims in Oklahoma, now has a toll-free number for providers — 1-800-366-9366. Physicians in Oklahoma City should continue to call (405) 521-8730.

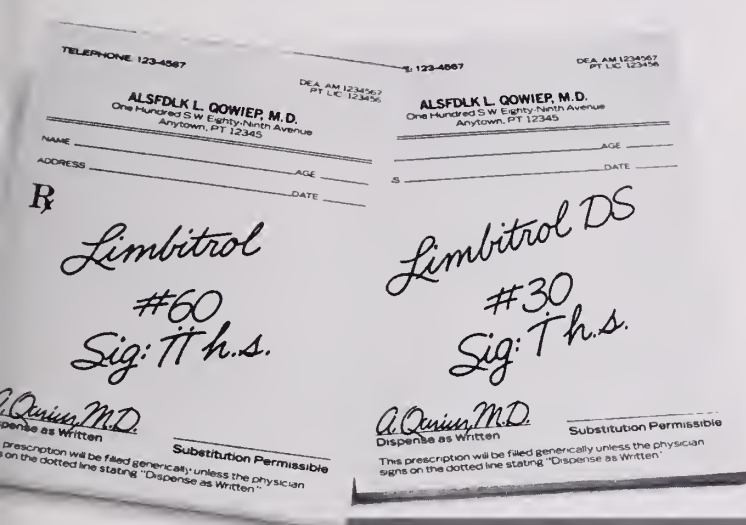
■ **Guidelines for Do Not Resuscitate Orders in the Prehospital Setting** is the title of a new document from the American College of Emergency Physicians (ACEP). The guides were produced in an effort to help develop uniform policies for dealing with emergency situations involving the terminally ill in the prehospital environment. Copies of the criteria are available from the ACEP Distribution Center in Irving, Texas, (214) 550-0911.

■ **The 1988 Great American Smokeout will be** Thursday, November 17. Sponsored by the American Cancer Society, the annual event urges smokers to give up smoking for just one day, a first step toward breaking the habit. This year's campaign describes cigarettes as "a pack of lies" and depicts ashtrays full of cigarette butts as "toxic waste dumps." □



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**Warnings:** Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100; Prescription Paks of 50.



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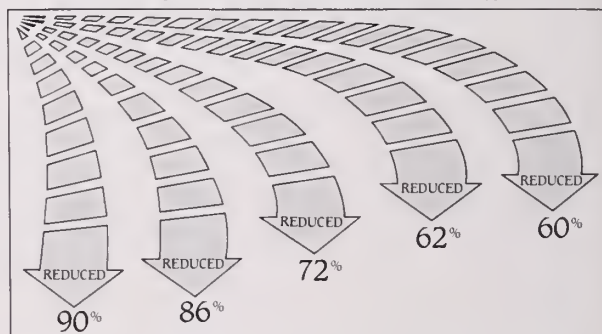
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# JOURNAL

OKLAHOMA STATE MEDICAL ASSOCIATION

NOVEMBER 1988

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	CONSTIPATION	RESPIRATORY DEPRESSION	SEDATION	EMESIS	PHYSICAL DEPENDENCE
HYDROCODONE		X			X
CODEINE	X	X	X	X	X
OXYCODONE	XX	XX	XX	XX	XX

Blank space indicates that no such activity has been reported.

Table adapted from Facts and Comparisons (Nov.) 1984 and Catalano RB. The medical approach to management of pain caused by cancer. "Semin Oncol" 1975; 2: 379-92 and Reuler JB, et. al. The chronic pain syndrome: misconceptions and management. "Ann Intern Med" 1980; 93: 588-96.

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1. Hopkinson JH III: *Curr Ther Res* 24: 503-516, 1978  
2. Beaver, WT *Arch Intern Med*, 141: 293-300, 1981

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**INDICATIONS AND USAGE:** For the relief of moderate to moderately severe pain.  
**CONTRAINDICATIONS:** Hypersensitivity to acetaminophen or hydrocodone.

**WARNINGS:**

**Allergic-Type Reaction:** VICODIN contains sodium metabisulfite, a sulfite that may cause allergic-type reactions including anaphylactic symptoms and life-threatening or less severe asthmatic episodes in certain susceptible people. The overall prevalence of sulfite sensitivity in the general population is unknown and probably low. Sulfite sensitivity is seen more frequently in asthmatic than non-asthmatic people.

**Respiratory Depression:** At high doses or in sensitive patients, hydrocodone may produce dose-related respiratory depression by acting directly on brain stem respiratory centers. Hydrocodone also affects centers that control respiratory rhythm, and may produce irregular and periodic breathing. If significant respiratory depression occurs, it may be antagonized by the use of naloxone hydrochloride (see ADVERSE REACTIONS: Respiratory Depression).

**Head Injury and Increased Intracranial Pressure:** The respiratory depressant effects of narcotics and their capacity to elevate cerebrospinal fluid pressure may be markedly exaggerated in the presence of head injury, other intracranial lesions or a preexisting increase in intracranial pressure. Furthermore, narcotics produce adverse reactions which may obscure the clinical course of patients with head injuries.

**Acute Abdominal Conditions:** The administration of narcotics may obscure the diagnosis or clinical course of patients with acute abdominal conditions.

**PRECAUTIONS:**

**Special Risk Patients:** As with any narcotic analgesic agent, VICODIN should be used with caution in elderly or debilitated patients and those with severe impairment of hepatic or renal function, hypothyroidism, Addison's disease, prostatic hypertrophy or urethral stricture. The usual precautions should be observed and the possibility of respiratory depression should be kept in mind. **Information for Patients:** VICODIN, like all narcotics, may impair the mental and/or physical abilities required for the performance of potentially hazardous tasks such as driving a car or operating machinery; patients should be cautioned accordingly.

**Cough Reflex:** Hydrocodone suppresses the cough reflex, as with all narcotics, caution should be exercised when VICODIN is used postoperatively and in patients with pulmonary disease.

**Drug Interactions:** Patients receiving other narcotic analgesics, antipsychotics, anti-anxiety agents, or other CNS depressants (including alcohol) concomitantly with VICODIN may exhibit an additive CNS depression. When combined therapy is contemplated, the dose of one or both agents should be reduced. The use of MAO inhibitors or tricyclic antidepressants with hydrocodone preparations may increase the effect of either the antidepressant or hydrocodone. The concurrent use of anticholinergics with hydrocodone may produce paralytic ileus.

**Usage in Pregnancy:** Pregnancy Category C. Hydrocodone has been shown to be teratogenic in hamsters when given in doses 700 times the human dose. There are no adequate and well-controlled studies in pregnant women. VICODIN should be used during pregnancy only if the potential benefit justifies the potential risk to the fetus.

**Nonteratogenic effects:** Babies born to mothers who have been taking opioids regularly prior to delivery will be physically dependent. The withdrawal signs include irritability and excessive crying, tremors, hyperactive reflexes, increased respiratory rate, increased stools, sneezing, yawning, vomiting, and fever. The intensity of the syndrome does not always correlate with the duration of maternal opioid use or dose. There is no consensus on the best method of managing withdrawal. Chlorpromazine 0.7 to 1.0 mg/kg q6h, and paregoric 2 to 4 drops/kg q4h, have been used to treat withdrawal symptoms in infants. The duration of therapy is 4 to 28 days, with the dosage decreased as tolerated.

**Labor and Delivery:** As with all narcotics, administration of VICODIN to the mother shortly before delivery may result in some degree of respiratory depression in the newborn, especially if higher doses are used.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk and because of the potential for serious adverse reactions in nursing infants from VICODIN, a decision should be made whether to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS:**

**Central Nervous System:** Sedation, drowsiness, mental clouding, lethargy, impairment of mental and physical performance, anxiety, fear, dysphoria, dizziness, psychic dependence, mood changes.

**Gastrointestinal System:** Nausea and vomiting may occur; they are more frequent in ambulatory than in recumbent patients. The antiemetic phenothiazines are useful in suppressing these effects; however, some phenothiazine derivatives seem to be antianalgesic and to increase the amount of narcotic required to produce pain relief, while other phenothiazines reduce the amount of narcotic required to produce a given level of analgesia. Prolonged administration of VICODIN may produce constipation.

**Genitourinary System:** Ureteral spasm, spasm of vesical sphincters and urinary retention have been reported.

**Respiratory Depression:** (See WARNINGS.)

**DOSE AND ADMINISTRATION:** Dosage should be adjusted according to the severity of the pain and the response of the patient. However, tolerance to hydrocodone can develop with continued use and the incidence of untoward effects is dose related.

The usual adult dosage is one or two tablets every four to six hours as needed for pain. The total 24 hour dose should not exceed 8 tablets.

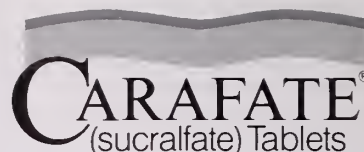
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**Knoll Pharmaceuticals**

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**BRIEF SUMMARY**

**CONTRAINDICATIONS**

There are no known contraindications to the use of sucralfate.

**PRECAUTIONS**

Duodenal ulcer is a chronic, recurrent disease. While short-term treatment with sucralfate can result in complete healing of the ulcer, a successful course of treatment with sucralfate should not be expected to alter the post-healing frequency or severity of duodenal ulceration.

**Drug Interactions:** Animal studies have shown that simultaneous administration of CARAFATE (sucralfate) with tetracycline, phenytoin, digoxin, or cimetidine will result in a statistically significant reduction in the bioavailability of these agents. The bioavailability of these agents may be restored simply by separating the administration of these agents from that of CARAFATE by two hours. This interaction appears to be nonsystemic in origin, presumably resulting from these agents being bound by CARAFATE in the gastrointestinal tract. The clinical significance of these animal studies is yet to be defined. However, because of the potential of CARAFATE to alter the absorption of some drugs from the gastrointestinal tract, the separate administration of CARAFATE from that of other agents should be considered when alterations in bioavailability are felt to be critical for concomitantly administered drugs.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Chronic oral toxicity studies of 24 months' duration were conducted in mice and rats at doses up to 1 gm/kg (12 times the human dose). There was no evidence of drug-related tumorigenicity. A reproduction study in rats at doses up to 38 times the human dose did not reveal any indication of fertility impairment. Mutagenicity studies were not conducted.

**Pregnancy:** Teratogenic effects. Pregnancy Category B. Teratogenicity studies have been performed in mice, rats, and rabbits at doses up to 50 times the human dose and have revealed no evidence of harm to the fetus due to sucralfate. There are, however, no adequate and well-controlled studies in pregnant women. Because animal reproduction studies are not always predictive of human response, this drug should be used during pregnancy only if clearly needed.

**Nursing Mothers:** It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when sucralfate is administered to a nursing woman.

**Pediatric Use:** Safety and effectiveness in children have not been established.

**ADVERSE REACTIONS**

Adverse reactions to sucralfate in clinical trials were minor and only rarely led to discontinuation of the drug. In studies involving over 2,500 patients treated with sucralfate, adverse effects were reported in 121 (4.7%).

Constipation was the most frequent complaint (2.2%). Other adverse effects, reported in no more than one of every 350 patients, were diarrhea, nausea, gastric discomfort, indigestion, dry mouth, rash, pruritus, back pain, dizziness, sleepiness, and vertigo.

**OVERDOSAGE**

There is no experience in humans with overdosage. Acute oral toxicity studies in animals, however, using doses up to 12 gm/kg body weight, could not find a lethal dose. Risks associated with overdosage should, therefore, be minimal.

**DOSAGE AND ADMINISTRATION**

The recommended adult oral dosage for duodenal ulcer is 1 gm four times a day on an empty stomach.

Antacids may be prescribed as needed for relief of pain but should not be taken within one-half hour before or after sucralfate.

While healing with sucralfate may occur during the first week or two, treatment should be continued for 4 to 8 weeks unless healing has been demonstrated by x-ray or endoscopic examination.

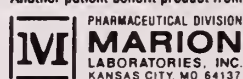
**HOW SUPPLIED**

CARAFATE (sucralfate) 1-gm tablets are supplied in bottles of 100 (NDC 0088-1712-47) and in Unit Dose Identification Paks of 100 (NDC 0088-1712-49). Light pink scored oblong tablets are embossed with CARAFATE on one side and 1712 bracketed by Cs on the other. Issued 1/87

**Reference:**

1. Eliakim R, Ophir M, Rachmilewitz D: *J Clin Gastroenterol* 1987;9(4):395-399.

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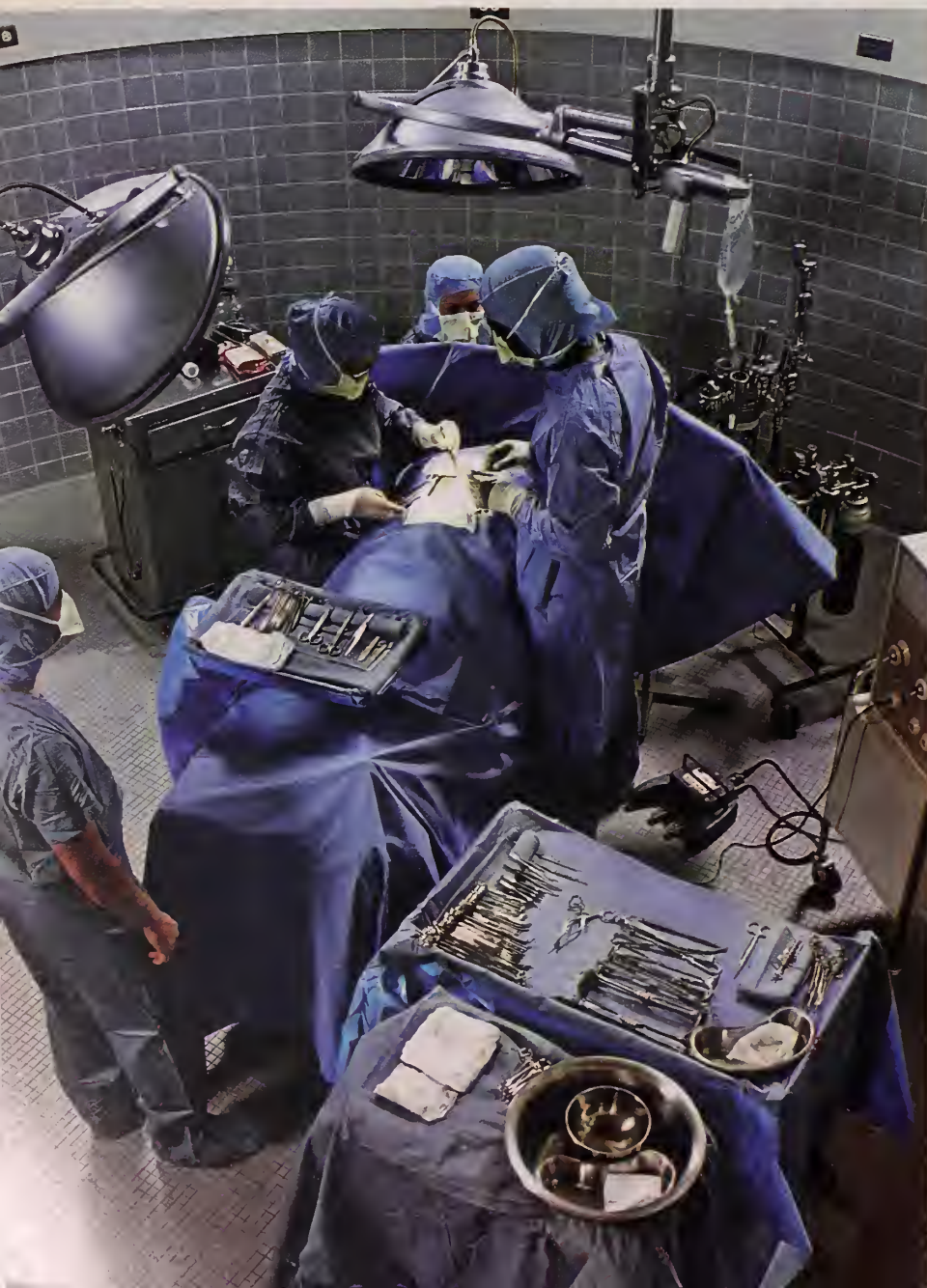
Aspirin  and other nonsteroidal anti-inflammatory drugs weaken mucosal defenses, which may lead NSAID  users to become prone to duodenal ulcers! For those NSAID  users who do develop duodenal ulcers, CARAFATE<sup>®</sup> (sucralfate/Marion) is ideal first-line therapy. Carafate rebuilds mucosal  defenses through a unique, nonsystemic mode of action. Carafate enhances the body's natural healing ability while it protects damaged mucosa from further injury. So the next time you see an arthritis patient with a duodenal ulcer, prescribe nonsystemic Carafate:  therapy for the ulcer-prone patient.

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For respiratory tract infections due to susceptible strains of indicated organisms.

#### Summary.

Consult the package literature for prescribing information.

**Indication:** Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:** Known allergy to cephalosporins

**Warnings:** CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS

Administer cautiously to allergic patients

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

#### Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.

• Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

#### Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

- Gastrointestinal (mostly diarrhea), 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthritis, and frequently, fever). 15%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonia, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%; genital pruritus or vaginitis, less than 1%; and, rarely, thrombocytopenia.
- Abnormalities in laboratory results of uncertain etiology**
- Slight elevations in hepatic enzymes
- Transient fluctuations in leukocyte count (especially in infants and children).
- Abnormal urinalysis, elevations in BUN or serum creatinine
- Positive direct Coombs' test
- False-positive tests for urinary glucose with Benedict's or Fehling's solution and Clintest<sup>®</sup> tablets but not with Tes-Tape<sup>®</sup> (glucose enzymatic test strip, Lilly).

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### Taking Leave

Hey, Pops. What's with the collar and tie? Doesn't that get uncomfortable?

And that suit. That's a real gas. I guess you change into something else before you jog or play tennis, but think how much time it takes you just changing clothes. That's why I wear a tee shirt, my jeans, and my joggers. I could just jog to the hospital or to my office if I wanted to and if it wasn't so much fun driving my Porsche. I don't go in much for dressing up just to go to work or to let people know I'm a doc. They can tell that from the stethoscope I wear around my neck.

By the way — where's your stethoscope, Pops? I don't see one anywhere. You were using one when you were examining that patient this afternoon, so I know you've got one. And while we're on the subject, Doc, what in hell were you doing for so long with that old geezer you were seeing? I'll bet you spent almost one solid hour talking to him and examining him and messing with him. You knew what was wrong with him before you started, and I bet you knew what you were going to prescribe for him in the first five minutes of talking to him. You could have saved all that time just by getting a chem twenty-five, an EKG, and ultrasound, and some x-rays. Anyhow, at his age how much good are you going to do for him?

Come on. Who's going to pay you for all that time?

I guess that's how they taught you to practice medicine back in those days. It must have been hairy. No CAT scans or MRIs or computers. Not even ultrasound or antibiotics or lasers or open heart surgery or dialysis. My God, what could you do for sick folks

once you figured out what was wrong with them, if you ever did? Did you think you could talk them well? Or did you believe if you asked them enough questions and listened to them, they would tell you what was wrong with them? I remember hearing you say once that talking to patients taught you more medicine than listening to professors.

For myself, I'm damned glad we've made some progress in the profession since your day. We don't need to waste time examining or talking to all the turkeys who think they're sick. Now we've got ways of finding out if they're sick, and ways to cure them if they are. And instead of wasting our time talking to them, hoping to learn something from the dummies, we can keep up through CME. Maybe someday we won't even have to call it the *practice* of medicine. Some day, after all you old codgers have died or retired, we'll have it down *perfect*.

Well, Pops, I got to go. I'm on call for my group this weekend, and I've got to see nineteen patients in the hospital. That's a bunch, but there's over twelve docs in our group now and we're all busy.

I sure hope none of those patients want to talk to me or want me to talk to their families. They always want to know where "*their* doctor" is or what's wrong with them or when they're going to get to go home. Why in hell they expect me to know I'll never understand.

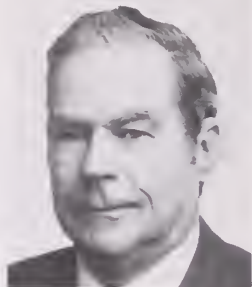
I hope I didn't hurt your feelings or make you feel bad. If I did, I'm sorry.

So long, Doc.

—MRJ

## PRESIDENT'S PAGE

In the billions of patient-physician transactions, there is a wide spectrum of quality in the human relationships that develop. Fear, hope, pain, despair, relief, joy, and depression may impinge on and flavor the attempted therapeutic process. The resultant relationship has a unique character and is different from parent-child, lawyer-client, and clergy-communicant connections. No other human interaction is quite like it.



Most physicians experience the essence of the patient-physician relationship during the first post-graduate year. Partly emotional, and therefore partially unteachable, a mature patient-physician relationship usually has stages of growth, and nearly always requires time and multiple interactions for maturation.

The new resident physician finds that he has some standing with the patients because he is the "new clinic doctor," but he also finds that his authenticity is limited by the successes of his predecessor, and his authority is limited to traditional therapies rather than his own abilities. The standards of the clinic establish a "patient-clinic" relationship rather than a true, mature patient-physician relationship. In many institutional and specialized tertiary care settings, patient rapport never develops beyond this stage.

But in those circumstances where continued care is rendered by the same physician, the practitioner will find that certain patients come to relate to him in a totally different way. The special relationship contains an emotional bond, but it is eminently rational. The patient may express the relationship by saying, "I trust this doctor." The physician expresses it by intuitively selecting and arranging the uniquely correct therapy that the patient really needs. When present, such a compact has near miraculous power. It is not necessarily permanent, however, and it tolerates very few human failures on either side. Adequate healing may occur in its absence, but its presence may be necessary in some critical illnesses for healing to occur.

It is an ideal to be sought by both patient and physician, and considerable energy should be applied to its development and preservation. Patients need a physician they trust, and heal best when they have one. Physicians intuitively do their best work when a good patient-physician relationship is present. The

practice of medicine is a ministry of healing when patient rapport is present, but merely a trade when rapport is absent.

The frequency of good patient-physician relationships is an excellent measure of the health and contentment of a population or a community. It is also an accurate measure of the emotional satisfactions of the medical professionals. The things that damage and denigrate the patient-physician relationship are generally bad for the public health of society. Those things that promote and strengthen a strong patient-doctor relationship are positive for the well-being of society.

In today's climate, when government bureaus and insurance companies frequently use their economic powers to intrude into medical practice, a sensitive test of the effect of their proposals is to ask: What will this regulation do to the patient-physician relationship?

Do mandated second opinions strengthen the patient-physician relationship?

Do DRG hospital payments improve patient-physician cooperation?

Do DHS welfare policies aid patient-physician rapport?

Do MAAC regulations promote friendly discourse between patients and physicians?

The negative answers to these and many other similar questions signal a significant deterioration in the general public health and in the emotional rewards of the medical profession. Increasing frequencies of patient-physician contact now seem to be motivated by fear and money. Also, a major shift in who is treating whom is apparently now underway, and perhaps soon most patients will be treated by health-care tradesmen rather than conscientious physicians practicing a calling.

Unfortunately, many political and economic forces are now coinciding to aggravate these tendencies, and many who do encourage these forces are ignorant or uncaring about the benefit to the patient that flows from the emotional bond of a good patient-physician relationship. Physicians who can appreciate the power of rapport must now try to preserve and protect those social conditions that permit its development, and try harder to teach the health administrators of its healing value.

*Ray V. McIntyre, M.D.*



# Immune Therapy of Cancer

Ed L. Calhoon, MD

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*Through the years, little attention has been directed toward immunotherapy in cancer. It has been assumed that lymphoid tissue may play a role in the etiology of cancer; now we have firm evidence that autoimmunity may be very important.*

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Advanced cancer will take the lives of almost half a million Americans this year. Certainly any claim of therapeutic accomplishments in this area will attract major public interest; consequently, scientific information has to be distributed to the public with great care. Overzealous news media can often distort. Practicing physicians and the public should clearly be informed that all interleukin-2-related clinical research is experimental.

An increasing body of evidence indicates that the immune system plays an important role in the defense against cancer. Lymphokines and cytokines are natural substances that man produces as a defense against disease. Through ingenious recombinant DNA technologies, these substances — interferons, tumor necrosis factor, and interleukins — can be produced in quantity sufficiently large to permit therapeutic application.

Interleukin 2 is the principal growth factor of T lymphocytes. The long-term proliferation of normal T lymphocytes in suspension was first achieved by Morgan et al, in 1976.<sup>1</sup> This T-cell-derived cytokine, initially designated T-cell growth factor, was later named interleukin-2 (IL-2).

Much work has been done in immunotherapy. LAK (lymphokine-activated killer) cells and IL-2-LAK cells are a unique population of cells that scientists generate in the laboratory. A patient's white blood cells are removed with a special machine and then treated with an immune system activator. The resulting LAK cells and IL-2 are then infused back into the patient. The IL-2 induces the LAK cells to multiply for a short time within the body, thus enhancing the body's ability to destroy cancer cells.

Failure of immunocompetence and resultant cancer is well known in acquired immunodeficiency syndrome (AIDS). It needs to be emphasized that the immune system, like any other system, has its limitations.

Because the immune network appears to be designed to recognize and eliminate exogenous invaders, including malignant cells, it seems logical to postulate that such an immunocompetence will be most effective against small tumor masses. Hence any unusual therapy probably should be aimed primarily against minimal disease. Another factor favoring such an approach is that tumor cells frequently display early an ability to protect themselves from such immune systems attack by producing immunosuppressive factors. However, the important reported work by Rosenberg et al, from the National Cancer Institute (NCI), explored the therapeutic efficacy in patients with advanced cancer.<sup>2</sup>

In evaluating the qualifications of laboratory work and its resultant use against neoplasm, one remembers the early expectations for A-interferons. High rates of response were claimed for many types

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Table 1. NCI Surgery Branch Results of All Patients Treated with IL-2 +/-LAK

	IL-2/LAK				IL-2 Alone			
	No. pts	CR*	PR†	Total CR & PR	No. pts	CR	PR	Total CR & PR
Renal	54	7 (13%)	10	17 (31%)	38	4 (10%)	3	7 (18%)
Melanoma	34	3 (9%)	3	6 (18%)	23	0	6	6 (26%)
Colorectal	27	1 (4%)	2	3 (11%)	10	0	0	0
Non-Hodgkin's lymphoma	4	1 (25%)	2	(75%)	3	0	0	0
Sarcoma	6	0	0	0	1	0	0	0
Lung adenocarcinoma	5	0	0	0	1	0	0	0
Breast	2	0	0	0	1	0	0	0
Brain/other	7	0	0	0	2	0	0	0
Total	139	12 (9%)	17	29 (21%)	79	4 (5%)	9	13 (16%)

\*CR = complete response      †PR = partial response

of neoplasms. Now, years later, this agent has perhaps established its main clinical role in a rare type of leukemia. Interferons can be reasonably tolerated by patients. Whether IL-2 and LAK can be tolerated has caused a storm of controversy among excellent clinicians.

Charles G. Mortel, MD, a respected Mayo Clinic physician and cancer expert, writing in the December 12, 1986, issue of the *Journal of the American Medical Association (JAMA)*, editorialized that unacceptably severe toxicity and expected resultant clinical improvements in many tumors was not forthcoming.<sup>3</sup> Richard Kradin, MD, and James Kurnick, MD, answered his criticism in the April 3, 1987, issue of *JAMA*. Their letter to the editor suggested that Dr Mortel's widely publicized critique had damaged the reputation of all IL-2-related

scientific programs. They spoke of a phase 11 immunotherapy trial at Massachusetts General Hospital, in which low doses of IL-2 were tolerated, and of positive observed tumor response in patients with lung and renal tumors.<sup>4</sup>

The entire January-February 1987 issue of the prestigious *Cancer Bulletin* from the University of Texas M.D. Anderson Hospital and Tumor Institute in Houston was devoted to the subject of IL-2-LAK and the results largely of all reported works, with an excellent historical background of adoptive immunotherapy.<sup>5</sup>

Perhaps this storm of controversy and the resultant information on this topic prompted the following: On April 7, 1987, the director of the NCI, Vincent DeVita, Jr., MD, issued an update on Dr Rosenberg's immunotherapy trials with LAK cells and IL-2. This

Table 2. Duration of Responses\* (NCI Surgery Branch)

	IL-2/LAK		IL-2 Alone	
	CR (months)	PR	CR (months)	PR
Renal	14+, 12+, 9+, 9+, 7+, 6, 2+	15+, 11+, 6+, 6, 6, 6, 2, 1, 1	13+, 7+, 6+, 4+, —	7+, 7, 3, 20+, 12+, 10, 8, 7, 2
Melanoma	31+, 11+, 11+	6, 2, 2	—	—
NHL	10	11+, 7+	—	—
Colorectal	17+	6, 2	—	—

\*13 of 16 patients achieving CR remain in CR at 2-31 months



Table 3. NCI Surgery Branch Results: Randomized Trial of IL-2/LAK vs IL-2 Alone

	IL-2/LAK				IL-2 Alone			
	No. pts.	CR	PR (duration of response)	Total CR & PR	No. pts	CR	PR	Total CR & PR
Renal	34	6 (18%) (14+,12+,9+,7+)	4	10 (29%) (11+,6+,6)	31	3 (10%)	2	5 (16%)
Melanoma	16	2 (12%) (11+,11+)	0	2 (12%)	12	0	4 (12+,10,8,3)	4 (33%)
Colorectal	5	0	0	0	7	0	0	0
NHL	2	0	1	1 (50%)	1	0	0	0

update appeared in the April 9 issue of the *New England Journal of Medicine*. The same issue also carried an article from Dr Robert Oldham, who had treated 40 patients in a separate study of LAK and IL-2.<sup>6</sup>

The Oldham report essentially confirmed Dr Rosenberg's results. These studies reported on advanced cancer failing other regimens. All patients had been treated between December 1984 and August 1986. Of 108 patients treated, response occurred most often among those with kidney cancer and melanoma. Dr Bruce Chabner, director of NCI's Division of Cancer Treatment, commented, "Any response at all in patients with advanced cancer of the types treated in this study is promising."

Dr Rosenberg, the original investigator, responded, "Like surgery, radiotherapy, and chemotherapy, modalities which all required time and experience, this form of adoptive therapy needs further development and improvement before general clinical use is possible."

This controversy concerning these treatments prompted me to call Dr DeVita at the NCI and ask for an update at the September 20, 1987, National Cancer Advisory Board (NCAB) meeting. A well-

prepared and thorough review was presented by Dr DeVita at the board meeting. This review indeed seemed to confirm a great deal of patient response (Tables 1-8). I remain as enthusiastic now as I was when the initial group of patients was first reported to us by Dr Rosenberg at the NCAB on May 13, 1985.<sup>7</sup> It is a step in the right direction to treat human involvement instead of laboratory animals.

The September 1987 issue of *Oncology and Biotechnology* reports a trial of still further significance using IL-2 and tumor necrosis factor at Alta Bates Hospital in Berkeley, Calif. The lymphokines in this study were furnished by CETUS Corporation.<sup>8</sup>

Private enterprise should be involved. Dr Robert

Table 5. Extramural Institutions

City of Hope  
Tufts  
University of California, San Francisco  
Loyola  
Einstein/Montefiore  
University of Texas, San Antonio

Table 6. Results of Initial Extramural Confirmatory Trial

	No. pts	No. responses		Total CR & PR
		CR	PR	
Renal	32	2 (6%)	3	5 (16%)
Melanoma	32	1 (3%)	5	6 (19%)
Colorectal	19	1 (4%)	2	3 (16%)
Lymphoma	1	0	1	1 (100%)
Total	87	4 (5%)	11	15 (17%)

Table 4. BRMP Intraperitoneal IL-2/LAK Results

	No. pts	CR	PR
Ovarian	9	0	2
Colorectal	11	0	4
Endometrial	1	0	0
Total	21	0	6 (29%)

Table 7. Results of Second Extramural Confirmatory Trial

**Differences from the initial trial**

- a. Decrease in priming (IL-2) days from 5 to 3
- b. IL-2 given by continuous infusion for 6 days during LAK cell administration
- c. Concentrate leukopheresis in days 2-5 after IL-2 priming formerly was days 3-7

Results	No. pts	No. responses		Total CR & PR
		CR	PR	
Renal	33	0	3	3 (9%)
Melanoma	43	0	6	6 (14%)
Lymphoma	7	0	1	1 (14%)
Total	83	0	10	10 (12%)

Table 8. Significant Toxicities

	Surgery Branch	Initial Extramural Trial	Second Extramural Trial
Anemia requiring transfusion	77%	72%	16%
Hypotension requiring pressors	70%	74%	37%
Hepatitis A infection	2%	18%	0
Weight gain (>10%)	27%	48%	36%
Myocardial infarction	2%	4%	0
Arrhythmias	11%	21%	11%
CNS symptoms:			
Somnolence	20%	3%	6%
Disorientation	35%	32%	16%
Coma	4%	1%	1%
Seizure	0	0	1%
Respiratory distress requiring intubation	8%	2%	4%
Ischemic bowel/perforation	0	2%	2%
Death	2%	1%	1%

Oldham's Biotherapeutics, Inc., is rapidly expanding into a nationwide network of private cancer research facilities. It is hoped such expansions will not be charlatan oriented.

Future directions should include expansion to large numbers of patients treated in a Food and Drug Administration (FDA) group C mechanism (patients in clinical comprehensive cancer centers). Combinations of IL-2 and LAK with other chemotherapeutics or biological agents might support innovative clinical research in all areas of adoptive immunotherapy.

Adoptive immunotherapy is the transfer to the tumor-bearing host of active immunologic reagents (such as cells) with antitumor reactivity that can mediate, either directly or indirectly, antitumor effects.

From the very small group of patients first treated by Dr Rosenberg at NCI, and the group of six NCI-selected sites<sup>9</sup> conducting similar research, this therapy has evolved to the present expanded program. It is hoped this research will continue and will become a successful armamentarium in the treatment of malignant disease.

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# Perinatal Lawsuits in Oklahoma

Ray V. McIntyre, MD

*The Loss Prevention Committee of the Physicians Liability Insurance Company reports to its Board of Trustees on claims against obstetricians in Oklahoma.*

**T**he lawsuits and claims generated by fetal damage events have discouraged Oklahoma obstetricians, and have cost large insurance premium dollar amounts. To illuminate the problem, a study of the clinical features of these perinatal claims has been done by the Physicians Liability Insurance Company (PLICO).

PLICO is a professional liability insurance company wholly owned by the Oklahoma State Medical Association. The company insures nearly all MD physicians in Oklahoma and has covered about 3,650 policyholders since 1980.

From January 1, 1980, to September 10, 1987, PLICO-insured physicians delivered 103 obstetrical cases that generated 137 claims or suits against the delivering physicians. The total amount paid on twenty-four completed claims is \$5,273,500 (average \$219,729). The insurance reserves established on the remaining pending claims and suits total \$2,634,500 (average \$95,547). During this same period, approximately 383,000 babies were born in Oklahoma; one baby in 3,800 incites a claim against PLICO.

The clinical data derived from insurance claim reports are sometimes sketchy; nevertheless, the aggregation presents an interesting perspective. As the total cases were 103, the numbers listed can be

read as approximate percentages. Prominent clinical features of the delivery are listed with the number of cases having the feature:

- 21 Prematurity or small birth weight (less than 2000 grams)
- 16 Prolonged rupture of the membranes
- 11 Meconium in the amniotic fluid
- 10 Eclampsia or pre-eclampsia
- 9 Breech presentation
- 9 Post maturity in question
- 8 Shoulder dystocia and/or brachial plexus injury
- 7 Compressed umbilical cord
- 7 Abruptio placenta

Ten various congenital defects were also present in the 103 cases.

Thirty-two cesarian sections are recorded. An oxytocin induction or augmentation was used in fifteen deliveries. Forceps application was questioned in eight circumstances. The plaintiffs alleged a failure to use or to correctly interpret the fetal monitor in fifteen cases.

The 103 cases included five sets of twins; the expected ratio is one set of twins per 90 births. In four instances the second twin fared poorly, and in the fifth case both died. There were 26 stillbirths and one "blighted ovum"; the remaining 71 babies were born alive, but many had significant neurological damage, and many did not survive.

The mother's age was recorded in 37 instances, and ranged from 16 through 38 years. The average

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age of claimant mothers was 23.2 years (median age 22 years) at the time of delivery. Eleven of the 37 claimant mothers were age 16 or 17 years at delivery, while the general Oklahoma average age of parturition is approximately 25 years.

Sixty-one claimants had at least some prenatal care. Five cases had no prenatal care, and the record was silent on the remaining 27.

In ten of the claims, retrospective peer review found evidence of a physician failure to meet community standards, or an unjustifiable delay in seeking consultation. In the remaining 93 cases, physician management was reviewed as adequate, or absent any evident malfeasance. (Peer review is incomplete in a few cases.)

In the defense of these claims, eighteen suits have been taken to trial. The defendant physician

has won defense verdicts in 16 trials (88%), and the plaintiff has won in 2 trials.

The study suggests:

The damaged-baby claimant population in Oklahoma contains an overrepresentation of congenital defects, twins, stillbirths, and very young mothers.

Although insurance payouts on obstetric incidents are costly, *true obstetric malpractice in Oklahoma is quite rare.*

For Oklahoma's babies, the medical profession needs to develop new ideas and concepts on the cause of intrauterine fetal damage.

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# Reye Syndrome: Current Trends

Harris D. Riley, Jr., MD

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*The approach of winter and the influenza season is an appropriate time to note again the relationship between Reye syndrome and the use of aspirin.*

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From time to time reports on Reye syndrome (RS) has appeared in the *Journal of the Oklahoma State Medical Association*,<sup>1-3</sup> and periodically the Oklahoma State Health Department has issued information statements on the disorder.<sup>4,5</sup> Because of the importance of this disease, which is accompanied by a high morbidity and mortality rate, the Centers for Disease Control (CDC) instituted a nationwide surveillance program to monitor the incidence of RS between December 1973 and June 1974. This national surveillance system was reinstituted in December 1976 and has been maintained continuously since that time. Much of the current information about RS is derived from this surveillance program. Because there have been significant changes in the occurrence and other aspects of RS in recent years, it is important to examine the latest results from the surveillance program. Much of the following information comes from the CDC's report on the 1986 findings.<sup>6</sup>

For the 1986 surveillance year (December 1, 1985, through November 30, 1986), 101 cases of Reye syndrome were reported to the National Reye Syndrome Surveillance System (NRSSS) of the Centers

for Disease Control. All met the CDC's case definition of the disorder. That definition is as follows: (1) acute noninflammatory encephalopathy documented by alteration in the level of consciousness and, if available, a record of cerebrospinal fluid containing 8 leukocytes or less per cu mm, or histologic sections of the brain demonstrating cerebral edema without perivascular or meningeal inflammation; (2) hepatopathy documented by either biopsy or autopsy considered to be diagnostic of RS, or by a threefold

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***In Oklahoma,  
a significant decrease in  
the reported number of cases  
[of RS] has occurred.***

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or greater rise in the levels of either serum glutamic-oxaloacetic transaminase (SGOT), serum glutamic-pyruvic transaminase (SGPT), or serum ammonia; and (3) no more reasonable explanation for the cerebral or hepatic abnormalities.<sup>6</sup>

In the past, influenza B has been associated with an increased incidence of RS. However, from December 1985 through November 1986, a period that encompassed widespread influenza B activity in the United States, the number of RS cases reported was

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Table. Reported Cases of Reye Syndrome (RS) and Varicella-Associated RS and Incidence of RS — United States, 1974 and 1977-1986\*

Year†	Predominant Influenza Strains Jan-May	RS Cases	No. Varicella-Associated RS Cases	Incidence of RS‡	Fatality Rate (%)
1974	B	379	—	0.58	41
1977	B	454	73	0.71	42
1978	A(H3N2)	236	69	0.37	29
1979	A(H1N1)	389	113	0.62	32
1980	B	555	103	0.88	23
1981	A(H3N2)	297	77	0.47	30
1982	B	213	45	0.34	35
1983	A(H3N2)	198	28	0.32	31
1984	A(H1N1) + B	204	26	0.33	26
1985	A(H3N2)	93	15	0.15	31
1986	B	101	5	0.16	27

\*From MMWR 36:690, 1987

†RS reporting year begins December 1 of previous year

‡Per 100,000 US population &lt;18 years of age (US Bureau of Census data)

less than half the lowest number previously reported during a year with extensive influenza B activity. In addition, the reported number of varicella-associated RS cases (5) was the lowest since continuous national Reye syndrome surveillance began in 1977 (Table).<sup>6</sup>

Thirty states and the Pacific Island Territories reported cases during the year. Distributions by sex and race were similar to those of previous years: 52% of patients for whom this information was reported were female; 88% were white, 8% black, and 4% Asian or Pacific Islanders. Thirty-eight percent of patients with RS were 0 to 4 years of age; 12%, 5 to 9 years; 34%, 10 to 14 years; 15%, 15 to 19 years; and 2%, more than 20 years. Despite a high incidence of influenza B in early 1986, the reported incidence of RS among children less than 10 years of age was lower that year than in 1985. However, the incidence of RS among children more than 10 years of age was higher in 1986.<sup>6</sup>

Consistent with previous temporal association between incidences of RS and influenza, 74% of patients reported in 1986 were hospitalized during January, February, and March, the peak months of influenza B activity. Early 1986 had seen, by several measures, the most widespread influenza B activity in ten years.<sup>7</sup> Compared with other recent influenza B seasons — 1979-80, a season of relatively heavy influenza virus activity; 1981-82, a season of minimal influenza virus activity; and 1983-84, a season of combined A (H1N1) and B activity — the 1985-86 season showed a decline in incidence of RS for all

age groups, with the smallest decline being in the 15- to 19-year age group.<sup>6</sup>

Ninety-two patients (91%) had an antecedent illness within three weeks prior to the onset of vomiting or neurologic symptoms compatible with RS. For 74% of these patients, the antecedent illness was primarily respiratory in character. Five percent had experienced varicella; another 5%, diarrhea without respiratory symptoms; 10%, fever or non-varicella rash without respiratory symptoms; and 5%, other or unknown signs and symptoms.<sup>6</sup>

Most patients were admitted to hospitals in one of the three precomatose stages of RS: 3% were in stage 0, 36% in stage 1, and 40% in stage 2. Of 92 patients whose most severe stage of RS was reported, 22% reached only stage 1; 25% reached stage 2; 8%, stage 3; 6%, stage 4; and 25%, stage 5. Thirteen percent received treatment that precluded classification. Twenty-five of the 92 patients with the reported outcome died, a fatality rate of 27%.<sup>6</sup>

Although the number of cases reported to the NRSS is presumably less than the true number of cases occurring in the United States each year, the NRSS provides crude annual comparisons of RS activity. Furthermore, since a major multicenter study on RS (Public Health Service [PHS] Main Study on Reye Syndrome and Medications) was carried out during 1985 and 1986, it is unlikely that the decline in number of cases reported is an artifact of decreased reporting over these years.<sup>6</sup>

The total number of reported cases of RS for 1986



is lower than would be expected, considering influenza B activity during previous years. Although the number of cases reported in 1986 is slightly higher than that reported in 1985, the 1986 total is less than 30% that reported for any previous year with extensive influenza B activity and less than half the total for 1982, when there was a very low level of influenza B activity (Table). By available surveillance determinants, influenza B activity was heavier during the 1985-86 season than during any previous season for which simultaneous RS surveillance was conducted.<sup>7</sup> Also, the number of reported varicella-associated RS cases was unusually low despite evidence of relatively stable national varicella activity.<sup>8</sup>

Both the pilot phase of the Public Health Service study on RS and medications, published in 1985, and the main study, published in 1987, have confirmed prior reports of an association between ingestion of aspirin during an antecedent viral illness and subsequent development of RS.<sup>9,10</sup> Because the increasing publicity about the association between RS and aspirin began in late 1980, much of the decline in the reported incidence of RS in the United States may be attributable to possible decreases in the frequency and/or dosage of this medication used in treating children with influenzalike illness or varicella.<sup>10-12</sup>

Preliminary results from the 1987 surveillance indicate further decreases in the reported number of RS cases in the United States. In Oklahoma, a significant decrease in the reported number of cases has occurred. As RS becomes increasingly rare in this country, interest in reporting may also start to diminish. Health-care personnel and agencies are urged to continue reporting to the NRSS to assure the best possible epidemiologic monitoring of this

illness. In addition, physicians, parents, and older children who self-medicate should be aware of the increased risk of RS associated with using aspirin (and possibly all salicylates) to treat children, including teenagers, with influenzalike illness or chicken pox (varicella).

Some of the reasons for the long period between the first reports of an etiologic association between RS and the use of aspirin and the issuance of warnings by official agencies have been reviewed.<sup>13</sup> Attention must now be given to the pathogenesis of salicylate-induced RS and the occurrence of RS primarily with influenza and varicella, rather than other infections.

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## Report of a Case: Foreign Body Embolism

William A. Miller, MD

*A case of embolization of a metallic pellet from the thigh to the chest is reported.*

A thirteen-year-old boy was first examined on July 1, 1974. He reported he had been shot accidentally in the thigh with a pellet gun one month earlier, while out of town. The local doctor cleaned the wound, gave him antibiotics and tetanus toxoid, and advised him to see me if he had any problems with the retained pellet. His mother, a former patient of mine, brought him in only for an estimate of the cost of removing the pellet later, if it became necessary.

Radiographs in my office showed that the pellet was not in the thigh, but had embolized to the chest. A cardiology consultant felt that the pellet was in a small pulmonary artery or embedded in the chordae tendineae and that, in the absence of symptoms, no further localizing studies were necessary. The patient has remained asymptomatic (verified by telephone consultation thirteen years after injury).

The possibility of migration, with or without serious effects, should be considered in patients with retained foreign bodies.<sup>1</sup>

*(continued)*



Figure 1. Radiograph made the day of injury

Direct correspondence to William A. Miller, MD, 5 Balsam Court South, Sugarmill Woods, Homosassa, FL 32646.



**Figure 2.** Anteroposterior radiograph made seven years after discovery of the pellet in the chest, showing no change in its position



**Figure 3.** Lateral radiograph of chest

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*Prior to his retirement a year ago, William A. Miller, MD, was an orthopedic surgeon in Oklahoma City and a clinical professor of orthopedic surgery at the University of Oklahoma College of Medicine.*



### Coming in December

Manuscripts being prepared for publication in December include a report on catamenial hemoptysis, a discussion of the diagnosis of atypical Hirschsprung's disease, and a case report on a clandestine foreign body in the middle ear.





## Partner Notification in the Prevention of AIDS and HIV Infection

Education to change behaviors that transmit HIV is the only means available for controlling the AIDS epidemic. For prevention education to have the greatest impact, it must target the groups that have the greatest risk of infection.

Provider notification of sexual partners, or contact tracing, has long been a part of sexually transmitted disease control programs. However, its application to the control of HIV infection has been more controversial.

Some 16 states have or are in the process of implementing provider referral programs to notify partners of persons who do not wish to do so themselves. In Oklahoma, persons in HIV counseling and

testing clinics who are found to be infected are encouraged to notify their partners. The Oklahoma State Department of Health is currently offering to assist with the notification, counseling, and testing of partners of persons who are infected with HIV and plans to expand these services in the coming months. As with other sexually transmitted diseases, the identities of infected persons are maintained with strict confidentiality.

Although costly in terms of resources and personnel time, provider referral of sexual and needle-sharing contacts appears to be an important way of providing essential education to those who need it most.

DISEASE	August 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	3	3	8	8
CAMPYLOBACTER INFECTIONS	53	150	167	164
ENCEPHALITIS, INFECTIOUS	0	4	15	20
GIARDIA INFECTIONS	39	119	123	141
GONORRHEA (Use ODH Form 228)	683	4857	6775	8292
HAEMOPHILUS INFLUENZAE INVASIVE DISEASE	23	140	136	124
HEPATITIS A	76	354	196	273
HEPATITIS B	18	121	179	154
HEPATITIS, NON-A NON-B	5	32	33	36
HEPATITIS UNSPECIFIED	2	21	24	63
MEASLES (RUBEOLA)	0	8	3	10
MENINGITIS, ASEPTIC	14	42	118	119
MENINGITIS, BACTERIAL (non-meningococcal, non H. Influenzae)	2	13	25	40
MENINGOCOCCAL INFECTIONS	1	14	20	21
PERTUSSIS	12	39	109	150
RABIES (Animal)	1	25	28	65
ROCKY MOUNTAIN SPOTTED FEVER	19	73	74	103
RUBELLA	0	1	5	1
SALMONELLA INFECTIONS	108	297	258	274
SHIGELLA INFECTIONS	45	128	110	135
SYPHILIS (Use ODH Form 228)	14	107	99	120
TETANUS	0	0	1	1
TUBERCULOSIS	15	157	172	162
TULAREMIA	3	12	20	15
TYPHOID FEVER	0	0	2	2
MUMPS	5	171	79	—

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	104
BRUCELLOSIS	1
LEGIONNAIRES' DISEASE	7
MALARIA	8
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	7

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## *Rare illness not yet erased*

### **New Reye syndrome warning to appear on aspirin products**

A revised Reye syndrome warning and attention-getting statement will be required on all nonprescription aspirin products labeled after December 9, 1988.

The new warning, says the Food and Drug Administration (FDA), is a modification of the one currently required. It states: "WARNING: Children and teenagers should not use this medicine for chicken pox or flu symptoms before a doctor is consulted about

**Related article, p 685.**

Reye syndrome, a rare but serious illness reported to be associated with aspirin." The phrase *reported to be associated with aspirin* is new.

In addition to the warning, aspirin products, for one year, must prominently display an attention-getting statement, such as a flag, alerting consumers to the new warning. These notices must include the words *new* and *warning*, or *Read new warning for children/teens*.

The stronger language comes as a result of a Public Health Service study that confirmed a significant association between Reye syndrome and the ingestion of aspirin by persons with chicken pox or influenza. Results of the study were published in the April 10, 1987, *Journal of the American Medical Association*.

FDA Commissioner Frank E. Young, MD, PhD,

noted that the number of cases of Reye syndrome has decreased since 1980, when the suspected association between Reye syndrome and aspirin use was first publicized. He said that pediatric aspirin use also declined during that period. However, he added that 101 cases of Reye syndrome reported as recently as 1986 indicate a need to require "a clear and uniform warning on aspirin products."

Reye syndrome, although rare, is fatal in 20% to 30% of cases, and some survivors sustain permanent brain damage. Its symptoms — severe fatigue, belligerence, and excessive vomiting — may appear in children or teenagers during their recovery from a case of flu or chicken pox. □



**Lonnie R. Bristow, MD** (center), American Medical Association trustee, pauses with members of the Oklahoma County Medical Society at their September 20 dinner meeting. Dr Bristow, guest speaker for the evening, discussed the relative value scale. With him are (l to r) Gary F. Strebel, MD, OCMS vice president and AMA alternate delegate; Larry L. Long, MD, speaker of the Oklahoma State Medical Association House of Delegates; M. Joe Crosthwait, MD, AMA delegate; and James B. Eskridge III, MD, AMA delegate.

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# DEATHS

## **Clemens Maximilian Hartig, MD** **1905 - 1988**

OSMA Life Member Clemens M. Hartig, MD, Tulsa, died August 27, 1988. The Lawrence, Kansas, native was graduated from the University of Kansas Medical School in 1943. He moved to Tulsa in 1953 and established a practice in general surgery. Dr Hartig retired in 1974.

## **Peter Angus MacKercher, MD** **1914 - 1988**

Peter A. MacKercher, MD, Ponca City, retired general practitioner and OSMA Life Member, died September 17, 1988. Dr MacKercher, who was born in Maxville, Ontario, Canada, earned his medical degree at the University of Louisville, Kentucky, in 1940. He moved to Ponca City in 1941 for his residency training. From 1943 to 1946, he served with the US Army Medical Corps, then returned to Ponca City.

## **John Copeland Pickard, MD** **1901 - 1988**

John C. Pickard, MD, retired Oklahoma City otolaryngologist, died August 31, 1988. Dr Pickard,

a Life Member of the OSMA, was born in Wabash, Indiana. He was graduated from the University of Oklahoma School of Medicine in 1926 and moved to Dubuque, Iowa, in 1929, returning to Oklahoma City in 1952.

## **Haskell Smith, MD** **1909 - 1988**

Stillwater general practitioner Haskell Smith, MD, a Life Member of the OSMA, died September 27, 1988. Dr Smith was born in Dustin, Oklahoma, and was graduated from the University of Oklahoma School of Medicine in 1934. He settled in Stillwater in 1939 after three years of medical practice in Texas.

## **Douglas Earl Wilson, MD** **1923 - 1988**

Retired Lawton orthopedist Douglas E. Wilson, MD, died March 29, 1988. A native of Hobart, Oklahoma, Dr Wilson was graduated from the University of Oklahoma School of Medicine in 1947. He served on active duty with the US Army during the Korean conflict, attaining the rank of captain. Dr Wilson, a Life Member of the OSMA, retired from active practice in 1983.



## **IN MEMORIAM**

### **1988**

<i>Charles Stewart Cunningham, MD</i>	<i>January 1</i>
<i>Charles Wallace Coyner, MD</i>	<i>January 4</i>
<i>Glen Franklin Wade, MD</i>	<i>January 12</i>
<i>Newman Sanford Matthews, MD</i>	<i>January 12</i>
<i>Frank Cornwell Lattimore, MD</i>	<i>January 30</i>
<i>Leo Lowbeer, MD</i>	<i>February 3</i>
<i>Joseph Norman Kramer, MD</i>	<i>February 16</i>
<i>Eugene Richard Flock, MD</i>	<i>February 17</i>
<i>Jay P. Irby, MD</i>	<i>February 25</i>
<i>James William Finch, MD</i>	<i>March 4</i>
<i>John Junior Donnell, MD</i>	<i>March 7</i>
<i>Douglas Earl Wilson, MD</i>	<i>March 29</i>
<i>Tony Willard Pratt, MD</i>	<i>April 21</i>
<i>James Park Dewar, Jr., MD</i>	<i>May 5</i>

<i>Hugh Albert Stout, MD</i>	<i>May 7</i>
<i>William Claude McCurdy, Jr., MD</i>	<i>May 22</i>
<i>James Robert Carroll, MD</i>	<i>May 28</i>
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<i>John Ralph Rafter, MD</i>	<i>August 1</i>
<i>Luther Harrison Becker, MD</i>	<i>August 9</i>
<i>Clemens Maximilian Hartig, MD</i>	<i>August 27</i>
<i>John Copeland Pickard, MD</i>	<i>August 31</i>
<i>Peter A. MacKercher, MD</i>	<i>September 17</i>
<i>Haskell Smith, MD</i>	<i>September 27</i>



## ***Transdermal drug reportedly reduces urge for cigarettes***

Research suggests that the antihypertensive drug clonidine may help smokers kick the habit by reducing their craving for cigarettes. A report from California says this effect also is seen when the drug is administered in a transdermal form — a patch that delivers clonidine into the bloodstream through the skin.

Steven A. Ornish, MD, now in private practice, and colleagues at the University of California, San Diego, School of Medicine looked at transdermal clonidine's effect on withdrawal symptoms in a double-blind, placebo-controlled study involving 40 smokers. Subjects were told to maintain their usual cigarette intake for three days, then stop smoking for the next three.

Compared with those receiving transdermal clonidine, the placebo group experienced more withdrawal symptoms such as craving, irritability, anxiety, restlessness, and hunger during the three-day cessation period, the study says.

The report appears in the September *Archives of Internal Medicine*. □

## **Surgeons, too, must be alert to indications of child abuse**

Surgeons caring for injured children can help spot child abuse by recognizing the characteristic features distinguishing accidental from intentional injuries, according to a recent report.

This is especially true in the case of abdominal injuries, say Daniel E. Ledbetter, MD, of Children's Hospital and Medical Center, Seattle, and colleagues, who reviewed the cases of 156 children who suffered abdominal injuries — 89% in accidents, 11% through abuse.

The abused children were younger than the others and had injuries unexplained by their medical histories. In addition, while 61% of the accident victims suffered injuries to a single, solid abdominal organ, 65% of the abused children had intestinal tract injuries.

"Surgeons who care for injured children need to have a high degree of suspicion for abuse, especially in younger children," the authors conclude.

The report appears in the September *Archives of Surgery*. □

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## BOOK SHOP

**Penicillin: Meeting the Challenge.** By Gladys L. Hobby. New Haven, Conn: Yale University Press, 1985, pp 319, illus, \$32.50.

The discovery of penicillin ranks among the most significant discoveries of mankind. There have been several books dealing with its history. In the majority of these, the roles played by Alexander Fleming, Howard Florey, and their coworkers have been the point of emphasis. This book is not the story of the discovery of penicillin, nor is it a biography of Fleming or Florey. In contrast, it deals with the story of penicillin itself and the many persons who made it the first in a remarkable series of therapeutic agents.

Gladys Hobby is a scientist who has been involved with the development of penicillin from the earliest stages. She has worked with it from its beginnings in the laboratory, through successive clinical trials, through the steps in production that made the trials meaningful, and on to the new and continuing search for new and more effective antimicrobials. Dr Hobby reiterates many of the well-known facts and emphasizes her personal interpretation of the early history of penicillin. That history covers the modest beginnings of the therapeutic evaluation of this agent on both sides of the Atlantic, and tells us of the responses of governmental organizations, pharmaceutical companies, research institutes, university laboratories, and clinics in the United



States to the request for production and evaluation of penicillin.

There are many interesting stories about therapeutic trials with penicillin. For example, in 1942 Dr Harry Eagle requested a small amount of penicillin from the Committee on Medical Research to conduct studies of its activity against the syphilitic spirochete. He reported that penicillin had no effect on spirochetes in vitro. We now know that it is the first-line drug against syphilis. Later it was established that the experiments had not been continued long enough to show the effectiveness of penicillin,



a drug that requires active cell multiplication, against an organism that at best multiplies slowly.

Among the strong points of the book the many excellent photographs of individuals involved in key aspects of the penicillin story. The text is also supplemented by useful charts. The references are carefully selected and the story is well documented.

This is another useful account of this remarkable therapeutic agent.

—Harris D. Riley, Jr., MD  
Oklahoma City

## Pioneering Research in Surgical Shock and Cardiovascular Surgery: Vivien Thomas and His Work with Alfred Blalock. By Vivien T. Thomas.

Philadelphia: University of Pennsylvania Press, 1985, pp 304, 78 photographs, \$29.95.

A review of *The Papers of Alfred Blalock* appeared in the *Journal of the Oklahoma State Medical Association*, 60:479, 1967. In it is mention of Vivien Thomas, who had a long association with Dr Blalock. In 1930, Thomas, a young black boy of 19, was

employed at Vanderbilt University Hospital as a laboratory technician in the surgical experimental laboratory under Blalock. He learned to operate, to perform a number of chemical determinations needed for experiments, to calculate results, and to keep precise and clear protocols and records, and thus became an invaluable associate. His manual skill involving operative techniques became legendary. When Blalock was appointed to the chair in surgery at Johns Hopkins in 1941, Thomas accompanied him to Baltimore.

This book is the autobiography of Thomas. It opens with a foreword by Mark M. Ravitch, long associated with the Hopkins surgical program and editor of *The Papers of Alfred Blalock*. The book is divided into three major parts. Part One, "The Vanderbilt Years," takes the reader from Thomas's birth in 1910 through 1941. It describes his home life in Nashville; the influence of his parents, who insisted on frugality as well as gainful employment for their children; and his experience at Vanderbilt University Hospital in the experimental laboratory.

(continued)



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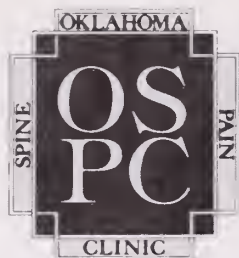
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### ANNOUNCEMENT

American Medical Association  
Hospital Medical Staff Section  
Twelfth Assembly Meeting  
December 1-5, 1988

Medical Staffs from across the country are encouraged to elect a medical staff representative to participate in the AMA-HMSS Assembly meeting December 1-5, 1988 at the Loews Anatole Hotel in Dallas.

The HMSS Assembly provides medical staffs with a unique opportunity to discuss and participate in the policymaking process of the AMA. In addition to the Assembly Meeting, the HMSS is sponsoring an educational forum on incorporation of the medical staff and on the role of the hospital medical director. CME credits have been requested.

For further information about the AMA-HMSS, please call (312) 645-4754.

## Book Shop (continued)

Part Two, "The Hopkins Years," is the longest section of the book. Thomas accompanied Blalock to Baltimore in 1941 and continued as director of the experimental surgery laboratory. He was a primary participant in the design and performance of new operative procedures. He was present and materially assisted in the operation for treatment of the tetralogy of Fallot, in the development of the surgical treatment of transposition of the great vessels, and of closed chest massage for cardiac arrest.

Part Three, "Recognition," tells of the presentation of a portrait of Thomas by surgical residents which now hangs in the Johns Hopkins Hospital, his being awarded an honorary doctorate by Johns Hopkins University, and his appointment as a member of the medical school faculty in recognition of his contributions to the development of cardiovascular surgery and to the education of many young surgeons. Thomas, age 75, died shortly after the book was completed.

All three sections are sprinkled liberally with photographs. This book will be of interest to persons associated with Johns Hopkins or Vanderbilt University, or those interested in the history of shock and of cardiovascular surgery. Although it suffers from some organizational problems, it tells a remarkable story.

—Harris D. Riley, Jr., MD  
Oklahoma City



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*(continued on next page)*

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(continued from p 699)

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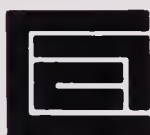


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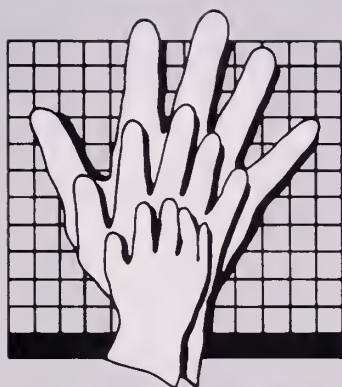
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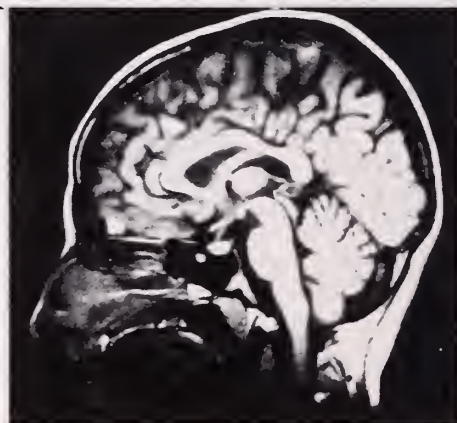
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Articles submitted for publication, including Annual Meeting papers, become the sole property of the JOURNAL and must not have been published elsewhere. The Editorial Board reserves the right to edit any material submitted. Manuscripts must be typewritten, double-spaced, and submitted in duplicate. Receipt of manuscripts will be acknowledged, and unpublished manuscripts will be returned. The JOURNAL does not assume responsibility for the statements or opinions of any contributor.

### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc. are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

Microfilm copies of back issues of the JOURNAL can be purchased from University Microfilms International, 300 North Zeeb Road, Ann Arbor, Michigan 48106.

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### Career Spouse Membership

Last year the auxiliary wanted to create an awareness of a unique membership group. That group is composed of potential auxiliary members who are following their own profession or have a personal career. Married to a physician, a career spouse takes on a greater responsibility than normal. Besides the normal daily and weekly home commitments, career spouses are involved in their own personal career pursuits and dedicate a great deal of time to their profession. These potential members are a great resource to the OSMA and should be pursued for active involvement in the auxiliary.

Special efforts were made to attract the career spouses. Meetings were held during lunch hours; picnics brought all members of the family together; meetings were started at the times designated; meeting topics included areas of general interest to all spouses; personal contacts were made with potential members; career spouses were invited to chair meetings.

During this period of time, it was reconfirmed that these are highly motivated people whose free time is fairly guarded. When the benefits of participating in the auxiliary are fully explained to them, they usually commit at least a portion of their free time to an organization that has such an impact on the medical family. Finding time for errands and

other personal chores during their work time, when attracted to the auxiliary, they free enough time to become involved. We must communicate to them that without their involvement, the auxiliary loses the very uniqueness these individuals utilize in the pursuit of their own careers.

Suggestions were made for a special brochure that would outline the steps we should take to attract career spouses to the auxiliary. But career spouses are only a segment of our membership whose lifestyles are different. All members of the auxiliary are the physicians' best lobbyists, whether in the local communities promoting medical awareness or in the state capitol expressing our concerns to our legislators. Career spouses, including teachers, doctors, nurses, secretaries, and others, are all valuable resources whose enthusiasm and motivation for their own career will carry over to their involvement in the auxiliary.

Whether members of the OSMA or the OSMAA, recruiting new members for the auxiliary is a responsibility for all of us. Let your enthusiasm reach the career spouses who have so much to contribute when invited to participate with us.

— *John K. Johnson, PhD*  
*OSMAA Career Spouse Coordinator*

## THE LAST WORD

■ **September 17 was Dr Marion Wagnon Day** in Midwest City. The special observance, planned by family, friends, and colleagues, celebrated Dr Wagnon's 25 years of practice and included two parties — a "roast" on September 14 and a surprise reception on September 17, attended by over 400 guests. In addition to numerous professional achievements, including the presidency of the Oklahoma Academy of Family Practice, Dr Wagnon is an accomplished aerobatics pilot, founder of an air ambulance service, and medical air transportation consultant to the Federal Aviation Administration.

■ **Oklahoma's AIDS Information Line, 1-800-522-9054**, is a statewide, toll-free, staffed telephone system that operates 24 hours a day, year round. A joint project of the Oklahoma State Department of Health and the Oklahoma Department of Mental Health, the project provides factual AIDS information, referral information about HIV testing locations and support services, AIDS pamphlets, and AIDS videos for short-term loan/checkout. Other numbers worth noting are the National AIDS Hotline, 1-800-342-AIDS, and the Spanish Language AIDS Hotline, 1-800-344-SIDA.

■ **In response to member complaints about Yellow Pages listings**, the Oklahoma State Medical Association (OSMA) has initiated discussions with Yellow Pages representatives. Physicians are asked to send brief explanations of their complaints to the OSMA so that the extent of the problem can be determined. To date, the most common complaints have been improper listings and misleading information about the cost of listings.

■ **The OSMA welcomed a new staff member** on September 26. Bobbie L. Brown, Edmond, is now secretary to Robert W. Baker III, assistant to the executive director, and Otie Ann Carr, director of state legislation. Mrs Brown worked at the state capitol for six years, first with the Senate and more recently the House of Representatives, before joining the OSMA staff. She replaces Sandy Ruble, who resigned in August to assume another post.

■ **The telephone number for the new FAX machine** at OSMA headquarters in Oklahoma City

is (405) 842-1834. Physicians, clinics, and hospitals with FAX numbers are asked to inform Robert W. Baker III at the OSMA.

■ **The Educational Commission for Foreign Medical Graduates (ECFMG)** is exploring with the National Board of Medical Examiners (NBME) the feasibility of administering NBME Part I and Part II examinations to foreign medical students/graduates, in 1989, as an alternative to the Foreign Medical Graduate Examination in the Medical Sciences (FMGEMS) for ECFMG certification. To date, however, ECFMG certification remains a requirement for all foreign medical graduates to enter an accredited postgraduate medical education training program in the United States. ECFMG certification also facilitates obtaining a license to practice medicine in most states. Additional information on FMGEMS and ECFMG certification can be obtained by writing ECFMG, 3624 Market Street, Philadelphia, PA 19104-2685.

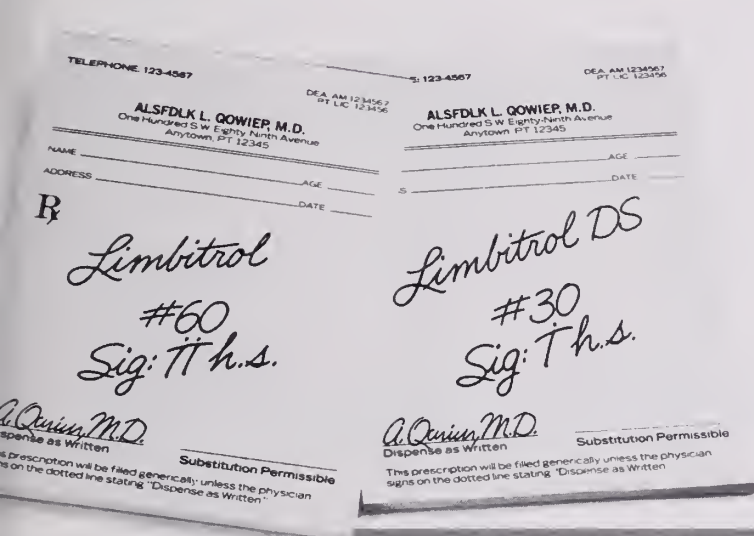
■ **Carl R. Bogardus, Jr., MD, Oklahoma City**, has assumed the office of secretary-treasurer of the American College of Radiology (ACR). His one-year term began with his installation at the ACR's Annual Meeting in Cincinnati, September 24-28. Dr Bogardus, a graduate of the University of Louisville (Kentucky) School of Medicine, is professor and vice chairman of radiological sciences and director of radiation oncology at the University of Oklahoma Health Sciences Center.

■ **Bethany physician Kenneth W. Whittington, MD**, has been named president-elect of the 60,000-member American Academy of Family Physicians. The election took place October 3 in New Orleans during the AAFP's annual meeting. Dr Whittington, a 1968 graduate of the University of Oklahoma College of Medicine, was president of the Oklahoma Academy of Family Physicians in 1980. A Fellow of the AAFP, he has just completed a three-year term on the AAFP Board of Directors and is currently chairman of the Commission on Public Health & Scientific Affairs. He has also served on the Chapter Affairs and Referendum committees. □



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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

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**Warnings:** Use with caution in patients with history of urinary retention or angle-closure glaucoma. Severe constipation may occur when used with anticholinergics. Closely supervise cardiovascular patients. Arrhythmias, sinus tachycardia, prolongation of conduction time, myocardial infarction and stroke reported with tricyclic antidepressants, especially in high doses. Caution patients about possible combined effects with alcohol and other CNS depressants and against hazardous occupations requiring complete mental alertness (e.g., operating machinery, driving).

**Usage in Pregnancy:** Use of minor tranquilizers during the first trimester should almost always be avoided because of increased risk of congenital malformations. Consider possibility of pregnancy when instituting therapy.

Withdrawal symptoms of the barbiturate type have occurred after discontinuation of benzodiazepines (see Drug Abuse and Dependence).

**Precautions:** Use cautiously in patients with a history of seizures, in hyperthyroid patients, those on thyroid medication, patients with impaired renal or hepatic function. Because of suicidal ideation in depressed patients, do not permit easy access to large quantities of drug. Periodic liver function tests and blood counts recommended during prolonged treatment. Amitriptyline may block action of guanethidine or similar antihypertensives. When tricyclic antidepressants are used concomitantly with cimetidine (Tagamet), clinically significant effects have been reported involving delayed elimination and increasing steady-state concentrations of the tricyclic drugs. Use of Limbitrol with other psychotropic drugs has not been evaluated; sedative effects may be additive. Discontinue several days before surgery. Limit concomitant administration of ECT to essential treatment. See Warnings for precautions about pregnancy. Should not be taken during the nursing period or by children under 12. In elderly and debilitated, limit to smallest effective dosage to preclude ataxia, oversedation, confusion or anticholinergic effects. Inform patients to consult physician before increasing dose or abruptly discontinuing this drug.

**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

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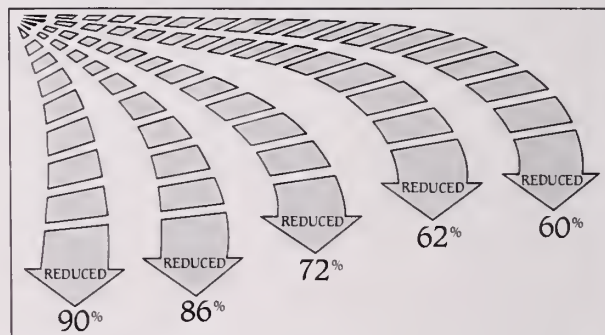
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And The Weeks That Follow

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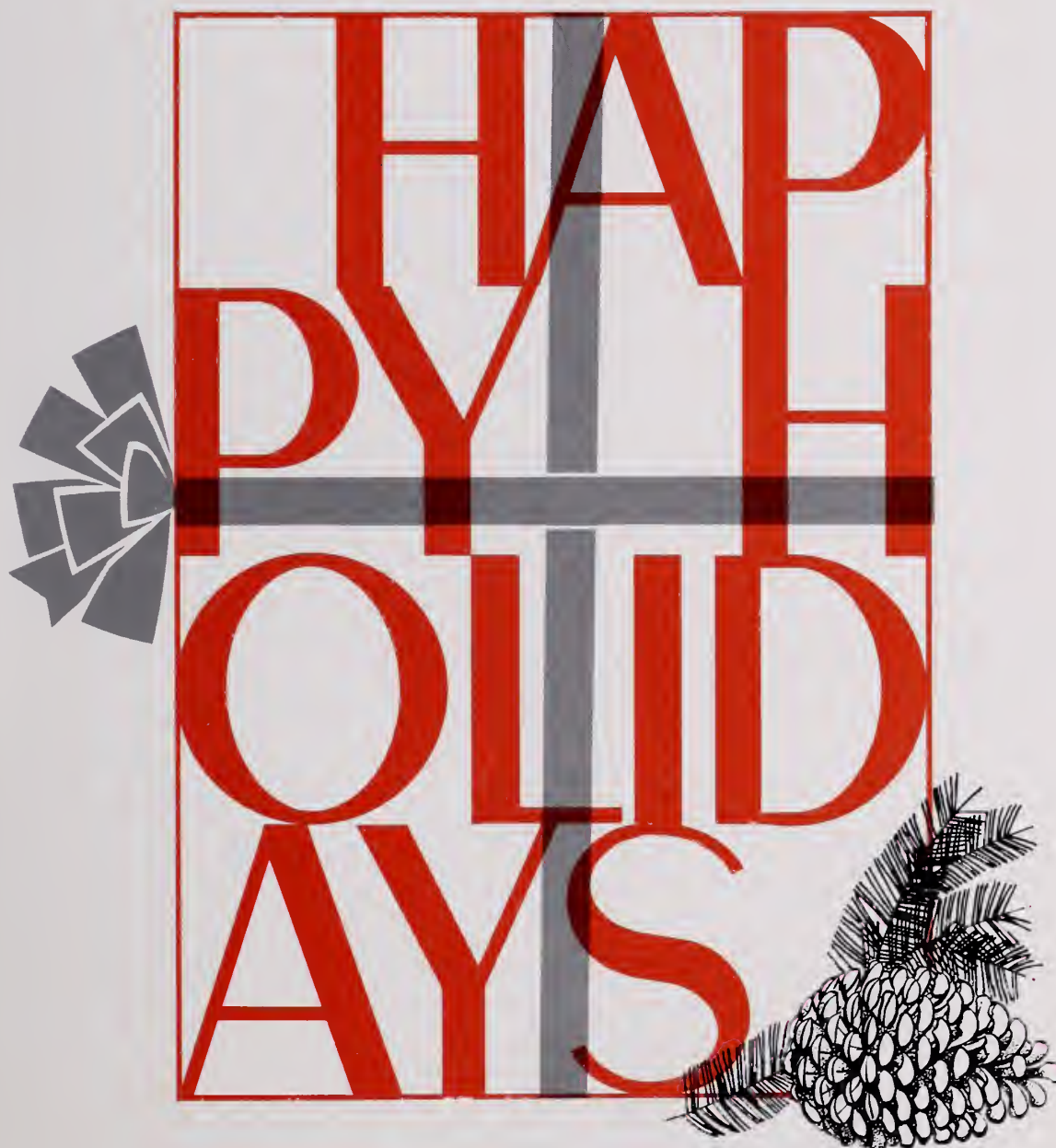


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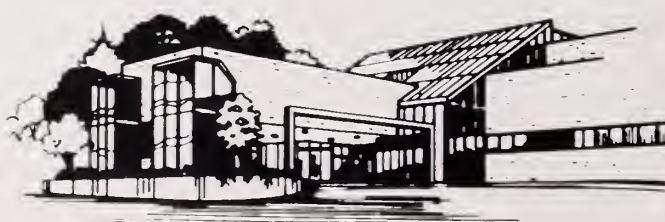
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A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.



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### BRIEF SUMMARY CONSULT PACKAGE INSERT FOR FULL PRESCRIBING INFORMATION

#### INDICATIONS AND USAGE

Cipro<sup>®</sup> is indicated for the treatment of infections caused by susceptible strains of the designated microorganisms in the conditions listed below:

**Lower Respiratory Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Pseudomonas aeruginosa*, *Haemophilus influenzae*, *Haemophilus parainfluenzae*, and *Streptococcus pneumoniae*.

**Skin and Skin Structure Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Proteus vulgaris*, *Providencia stuartii*, *Morganella morganii*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus aureus* (penicillinase and nonpenicillinase-producing strains), *Staphylococcus epidermidis*, and *Streptococcus pyogenes*.

**Bone and Joint Infections** caused by *Enterobacter cloacae*, *Serratia marcescens*, and *Pseudomonas aeruginosa*.

**Urinary Tract Infections** caused by *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Serratia marcescens*, *Proteus mirabilis*, *Providencia rettgeri*, *Morganella morganii*, *Citrobacter diversus*, *Citrobacter freundii*, *Pseudomonas aeruginosa*, *Staphylococcus epidermidis*, and *Streptococcus faecalis*.

**Infectious Diarrhea** caused by *Escherichia coli* (enterotoxigenic strains), *Campylobacter jejuni*, *Shigella flexneri*,\* and *Shigella sonnei*\* when antibacterial therapy is indicated.

\*Efficacy for this organism in this organ system was studied in fewer than 10 infections.

Appropriate culture and susceptibility tests should be performed before treatment in order to isolate and identify organisms causing infection and to determine their susceptibility to ciprofloxacin. Therapy with Cipro<sup>®</sup> may be initiated before results of these tests are known, once results become available appropriate therapy should be continued. As with other drugs, some strains of *Pseudomonas aeruginosa* may develop resistance fairly rapidly during treatment with ciprofloxacin. Culture and susceptibility testing performed periodically during therapy will provide information not only on the therapeutic effect of the antimicrobial agent but also on the possible emergence of bacterial resistance.

#### CONTRAINDICATIONS

A history of hypersensitivity to ciprofloxacin is a contraindication to its use. A history of hypersensitivity to other quinolones may also contraindicate the use of ciprofloxacin.

#### WARNINGS

CIPROFLOXACIN SHOULD NOT BE USED IN CHILDREN, ADOLESCENTS, OR PREGNANT WOMEN. The oral administration of ciprofloxacin caused lameness in immature dogs. Histopathological examination of the weight-bearing joints of these dogs revealed permanent lesions of the cartilage. Related drugs such as nalidixic acid, cinoxacin, and norfloxacin also produced erosions of cartilage of weight-bearing joints and other signs of arthropathy in immature animals of various species (SEE ANIMAL PHARMACOLOGY SECTION IN FULL PRESCRIBING INFORMATION).

#### PRECAUTIONS

**General:** As with other quinolones, ciprofloxacin may cause central nervous system (CNS) stimulation, which may lead to tremor, restlessness, lightheadedness, confusion, and very rarely to hallucinations or convulsive seizures. Therefore, ciprofloxacin should be used with caution in patients with known or suspected CNS disorders, such as severe cerebral arteriosclerosis or epilepsy, or other factors which predispose to seizures (SEE ADVERSE REACTIONS).

Quinolones may also cause anaphylactic reactions and cardiovascular collapse. Anaphylactic reactions may require epinephrine and other emergency measures.

Crystals of ciprofloxacin have been observed rarely in the urine of human subjects but more frequently in the urine of laboratory animals. Crystalluria related to ciprofloxacin has been reported only rarely in man, because human urine is usually acidic. Patients receiving ciprofloxacin should be well hydrated, and alkalinity of the urine should be avoided. The recommended daily dose should not be exceeded. Alteration of the dosage regimen is necessary for patients with impairment of renal function (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

**Drug Interactions:** Concurrent administration of ciprofloxacin with theophylline may lead to elevated plasma concentrations of theophylline and prolongation of its elimination half-life. This may result in increased risk of theophylline-related adverse reactions. If concomitant use cannot be avoided, plasma levels of theophylline should be monitored and dosage adjustments made as appropriate.

Antacids containing magnesium hydroxide or aluminum hydroxide may interfere with the absorption of ciprofloxacin, resulting in serum and urine levels lower than desired. Concurrent administration of these agents with ciprofloxacin should be avoided.

Probenecid interferes with the renal tubular secretion of ciprofloxacin and produces an increase in the level of ciprofloxacin in the serum. This should be considered if patients are receiving both drugs concomitantly.

As with other broad-spectrum antibiotics, prolonged use of ciprofloxacin may result in overgrowth of nonsusceptible organisms. Repeated evaluation of the patient's condition and microbial susceptibility testing is essential. If superinfection occurs during therapy, appropriate measures should be taken.

**Information for Patients:** Patients should be advised that ciprofloxacin may be taken with or without meals. The preferred time of dosing is two hours after a meal. Patients should also be advised to drink fluids liberally and not take antacids containing magnesium or aluminum concomitantly or within two hours after dosing. Ciprofloxacin may cause dizziness or lightheadedness; therefore patients should know how they react to this drug before they operate an automobile or machinery or engage in activities requiring mental alertness or coordination.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Eight *in vitro* mutagenicity tests have been conducted with ciprofloxacin and the test results are listed below:

- Salmonella/Microsome Test (Negative)
  - E. coli DNA Repair Assay (Negative)
  - Mouse Lymphoma Cell Forward Mutation Assay (Positive)
  - Chinese Hamster V<sub>79</sub> Cell HGPRT Test (Negative)
  - Syrian Hamster Embryo Cell Transformation Assay (Negative)
  - Saccharomyces cerevisiae Point Mutation Assay (Negative)
  - Saccharomyces cerevisiae Mitotic Crossover and Gene Conversion Assay (Negative)
  - Rat Hepatocyte DNA Repair Assay (Positive)
- Thus, two of the eight tests were positive, but the following three *in vivo* test systems gave negative results:
- Rat Hepatocyte DNA Repair Assay
  - Micronucleus Test (Mice)
  - Dominant Lethal Test (Mice)

Long-term carcinogenicity studies in animals have not yet been completed.

**Pregnancy—Pregnancy Category C:** Reproduction studies have been performed in rats and mice at doses up to six times the usual daily human dose and have revealed no evidence of impaired fertility or harm to the fetus due to ciprofloxacin. In rabbits, as with most antimicrobial agents, ciprofloxacin (30 and 100 mg/kg orally) produced gastrointestinal disturbances resulting in maternal weight loss and an increased incidence of abortion. No teratogenicity was observed at either dose. After intravenous administration, at doses up to 20 mg/kg, no maternal toxicity was produced and no embryotoxicity or teratogenicity was observed. There are, however, no adequate and well-controlled studies in pregnant women. SINCE CIPROFLOXACIN, LIKE OTHER DRUGS IN ITS CLASS, CAUSES ARTHROPATHY IN IMMATURE ANIMALS, IT SHOULD NOT BE USED IN PREGNANT WOMEN (SEE WARNINGS).

## CONVENIENT B.I.D. DOSAGE

### Recommended dosage schedule

Infection Site*	Severity of Infection	Dosage
Respiratory Tract*	Mild/Moderate	500 mg q12
Bone and Joint*	Severe/Complicated	750 mg q12
Skin/Skin Structure*	Mild/Moderate	250 mg q12
Urinary Tract*	Severe/Complicated	500 mg q12
Infectious Diarrhea*	Mild/Moderate/Severe	500 mg q12

**Nursing Mothers:** It is not known whether ciprofloxacin is excreted in human milk; however, it is known that ciprofloxacin is excreted in the milk of lactating rats and that other drugs of this class are excreted in human milk. Because of this, and because of the potential for serious adverse reactions from ciprofloxacin in nursing infants, decision should be made to discontinue nursing or to discontinue the drug, taking into account the importance of the drug to the mother.

**Pediatric Use:** Ciprofloxacin should not be used in children because it causes arthropathy in immature animals (SEE WARNINGS).

#### ADVERSE REACTIONS

Ciprofloxacin is generally well tolerated. During clinical investigation, 2,799 patients received 2,668 courses of the drug. Adverse events that were considered likely to be drug related occurred in 7.3% of courses, possibly related in 9.2%, and remotely related in 3.0%. Ciprofloxacin was discontinued because of an adverse event in 3.5% of courses, primarily involving the gastrointestinal system (1.5%), skin (0.6%), and central nervous system (0.4%).

The most frequently reported events, drug related or not, were nausea (5.2%), diarrhea (2.3%), vomiting (2.0%), abdominal pain/discomfort (1.7%), headache (1.2%), restlessness (1.1%), and rash (1.1%).

Additional events that occurred in less than 1% of ciprofloxacin courses are listed below. Those typical quinolones are italicized.

**GASTROINTESTINAL** (See above), painful oral mucosa, oral candidiasis, dysphagia, intestinal perforation, gastrointestinal bleeding.

**CENTRAL NERVOUS SYSTEM** (See above), dizziness, lightheadedness, insomnia, nightmares, hallucinations, manic reaction, irritability, tremor, ataxia, convulsive seizures, lethargy, drowsiness, weakness, malaise, anorexia, phobia, depersonalization, depression, paresthesia.

**SKIN/HYPERSENSITIVITY** (See above), pruritus, urticaria, photosensitivity, flushing, fever, chills, angioedema, edema of the face, neck, lips, conjunctivae or hands, cutaneous candidiasis, hyperpigmentation, erythema nodosum.

Allergic reactions ranging from urticaria to anaphylactic reactions have been reported.

**SPECIAL SENSES** blurred vision, disturbed vision, (change in color perception, overbrightness of light, decreased visual acuity, diplopia, eye pain, tinnitus, bad taste).

**MUSCULOSKELETAL** joint or back pain, joint stiffness, achiness, neck or chest pain, flare-up of gout, RENEAL/UROGENITAL interstitial nephritis, renal failure, polyuria, urinary retention, urethral bleeding, vaginitis, acidosis.

**CARDIOVASCULAR** palpitations, atrial flutter, ventricular ectopy, syncope, hypertension, angina pectoris, myocardial infarction, cardiopulmonary arrest, cerebral thrombosis.

**RESPIRATORY** epistaxis, laryngeal or pulmonary edema, hiccup, hemoptysis, dyspnea, bronchospasm, pulmonary embolism.

Most of these events were described as only mild or moderate in severity, abated soon after the drug was discontinued, and required no treatment.

In several instances, nausea, vomiting, tremor, restlessness, agitation, or palpitations were judged by investigators to be related to elevated plasma levels of theophylline possibly as a result of a drug interaction with ciprofloxacin.

**Adverse Laboratory Changes:** Changes in laboratory parameters listed as adverse events without regard to drug relationship:

Hepatic—Elevations of ALT (SGPT) (1.9%), AST (SGOT) (1.7%), alkaline phosphatase (0.8%), LDH (0.4%), serum bilirubin (0.3%).

Hematologic—eosinophilia (0.6%), leukopenia (0.4%), decreased blood platelets (0.1%), elevated blood platelets (0.1%), pancytopenia (0.1%).

Renal—Elevations of Serum creatinine (1.1%), BUN (0.9%).

CRYSTALLURIA, CYLINDRURIA, AND HEMATURIA HAVE BEEN REPORTED.

Other changes occurring in less than 0.1% of courses were: Elevation of serum gamma-glutamyl transferase, elevation of serum amylase, reduction in blood glucose, elevated uric acid, decrease in hemoglobin, anemia, bleeding diathesis, increase in blood monocytes, and leukocytosis.

#### OVERDOSAGE

Information on overdosage in humans is not available. In the event of acute overdosage, the stomach should be emptied by inducing vomiting or by gastric lavage. The patient should be carefully observed and given supportive treatment. Adequate hydration must be maintained. In the event of serious toxic reactions from overdosage, hemodialysis or peritoneal dialysis may aid in the removal of ciprofloxacin from the body, particularly if renal function is compromised.

#### DOSAGE AND ADMINISTRATION

The usual adult dosage for patients with urinary tract infections is 250 mg every 12 hours. For patients with complicated infections caused by organisms not highly susceptible, 500 mg may be administered every 12 hours.

Respiratory tract infections, skin and skin structure infections, and bone and joint infections may be treated with 500 mg every 12 hours. For more severe or complicated infections, a dosage of 750 mg may be given every 12 hours.

The recommended dosage for infectious diarrhea is 500 mg every 12 hours.

In patients with renal impairment, some modification of dosage is recommended (SEE DOSAGE AND ADMINISTRATION SECTION IN FULL PRESCRIBING INFORMATION).

#### HOW SUPPLIED

Cipro<sup>®</sup> (ciprofloxacin HCl/Miles) is available as tablets of 250 mg, 500 mg, and 750 mg in bottles of 50, and Unit-Dose packages of 100 (SEE FULL PRESCRIBING INFORMATION FOR COMPLETE INFORMATION).

\*Due to susceptible strains of indicated pathogens.  
See indicated organisms in Prescribing Information.

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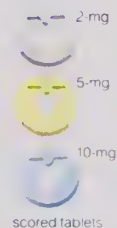
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## ALLAN J. HAMILTON, M.D.

Neurosurgical Resident and Research Fellow,  
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Albert Schweitzer Fellowship, International Albert Schweitzer  
Foundation; Harvard Medical School Cabot Prize for Best  
Senior Thesis; recently published article, "Who Shall Live  
and Who Shall Die" in Newsweek Magazine.



“The work I’m doing in the Army Reserve fits perfectly with my academic research interests in civilian life. The Army is very concerned with the effects of high-altitude cerebral edema, which is a mirror model of cerebral hypoxia, something I deal with every day in our neurosurgical intensive care unit. I couldn’t ask for a smoother transition. And that’s true for a lot of Reserve physicians. All we really do is change our clothes, not our mindset.

“Some of the projects the Army is undertaking are on the cutting edge of research. For example, I’m currently involved in developing for the Army a prototype of a non-invasive intracranial pressure-monitoring device that we hope will allow us to measure pressure changes as the brain swells—without drilling holes in the skull. If we can get our design to work, such a device could revolutionize high-altitude medicine as well as civilian neurosurgical care.

“The quality of medicine and the caliber of people I’ve been associated with in the Army Reserve are, without question, equal to civilian hospitals. In fact, I’m giving serious consideration to applying for an active duty academic position in Army Medicine when my residency ends at Massachusetts General.”

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Soldier being examined for effects of high-altitude cerebral edema.



# THE LOWER RESPIRATORY TRACT— More vulnerable to infection in smokers and older adults



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For respiratory tract infections due to susceptible strains of indicated organisms.

#### Summary.

Consult the package literature for prescribing information.

**Indication:** Lower respiratory infections, including pneumonia, caused by *Streptococcus pneumoniae*, *Haemophilus influenzae*, and *Streptococcus pyogenes* (group A  $\beta$ -hemolytic streptococci).

**Contraindication:** Known allergy to cephalosporins

**Warnings:** CECLOR SHOULD BE ADMINISTERED CAUTIOUSLY TO PENICILLIN-SENSITIVE PATIENTS. PENICILLINS AND CEPHALOSPORINS SHOW PARTIAL CROSS-ALLERGENICITY. POSSIBLE REACTIONS INCLUDE ANAPHYLAXIS.

Administer cautiously to allergic patients.

Pseudomembranous colitis has been reported with virtually all broad-spectrum antibiotics. It must be considered in differential diagnosis of antibiotic-associated diarrhea. Colon flora is altered by broad-spectrum antibiotic treatment, possibly resulting in antibiotic-associated colitis.

#### Precautions:

- Discontinue Ceclor in the event of allergic reactions to it.
- Prolonged use may result in overgrowth of nonsusceptible organisms.
- Positive direct Coombs' tests have been reported during treatment with cephalosporins.
- Ceclor should be administered with caution in the presence of markedly impaired renal function. Although dosage adjustments in

moderate to severe renal impairment are usually not required, careful clinical observation and laboratory studies should be made.

- Broad-spectrum antibiotics should be prescribed with caution in individuals with a history of gastrointestinal disease, particularly colitis.
- Safety and effectiveness have not been determined in pregnancy, lactation, and infants less than one month old. Ceclor penetrates mother's milk. Exercise caution in prescribing for these patients.

#### Adverse Reactions: (percentage of patients)

Therapy-related adverse reactions are uncommon. Those reported include:

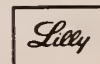
- Gastrointestinal (mostly diarrhea): 2.5%
- Symptoms of pseudomembranous colitis may appear either during or after antibiotic treatment.
- Hypersensitivity reactions (including morbilliform eruptions, pruritus, urticaria, and serum-sickness-like reactions that have included erythema multiforme [rarely, Stevens-Johnson syndrome] and toxic epidermal necrolysis or the above skin manifestations accompanied by arthritis/arthritis, and frequently, fever). 1.5%, usually subside within a few days after cessation of therapy. Serum-sickness-like reactions have been reported more frequently in children than in adults and have usually occurred during or following a second course of therapy with Ceclor. No serious sequelae have been reported. Antihistamines and corticosteroids appear to enhance resolution of the syndrome.

- Cases of anaphylaxis have been reported, half of which have occurred in patients with a history of penicillin allergy.
- As with some penicillins and some other cephalosporins, transient hepatitis and cholestatic jaundice have been reported rarely.
- Rarely, reversible hyperactivity, nervousness, insomnia, confusion, hypertonía, dizziness, and somnolence have been reported.
- Other: eosinophilia, 2%, genital pruritus or vaginitis, less than 1%, and, rarely, thrombocytopenia.
- Abnormalities in laboratory results of uncertain etiology:**
  - Slight elevations in hepatic enzymes.
  - Transient fluctuations in leukocyte count (especially in infants and children).
  - Abnormal urinalysis, elevations in BUN or serum creatinine.
  - Positive direct Coombs' test.
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### Santa, Please Don't Bring Me . . .

- Any more hospital advertisements which tell me what a good job they do keeping everybody healthy or how much like home their rooms are or how you can quit worrying about cancer if you get it cured by their doctors using their machines.

I'm so old fashioned that I still believe hospitals should be places where sick people go to get treated and, when possible, get well enough to go home and back to work. I never have been convinced that hospitals should run health clubs, spas, or town meetings.

- Any more notices about free blood tests or free urinalyses or free prostate exams or free Pap smears or free spinal exams or free anything that's going to make me worry. Too many times those free tests result in prolonged and unnecessary anxiety or completely unwarranted reassurance, and I don't need any more of either. Especially for free.

- Any more discount doctors. Discount merchandise I understand. Volume sales are exactly what patients shouldn't be getting from their doctors. In the world of personal services, time is of the essence and cannot be substituted.

Seeing a doctor is becoming exactly that for too many patients and seeing patients appears to be the sole talent of the discount doctors. They don't practice medicine; they sell procedures and run assembly lines.

- Any more megabuck health care corporations. If there ever was a misnomer, this is it. They care as much about health as we care about used bubble gum. They are dedicated to big, black bottom lines and nothing else. If it costs money, their high-salaried executives get rid of it. Quality is eliminated in the name of efficiency, professional talent and

experience are cashiered as superfluous, and young physicians, still burdened with the debt of their education and training, are recruited as financial slaves.

- Any more "Dear Doctor" letters from the bureaucrats. What follows that greeting usually proves that I'm really not dear to them and that I would be better off if they didn't care about me. I was a lot happier before they started writing me.

- Any more forms to fill out and return in the enclosed envelope. Most of them are sent to me by outfits that are making money from my patients some way or other, and they inform me that I've got to fill them out and sign them before they can do that. They rarely pay me for my trouble and have the unmitigated gall to expect me to pay for mailing them back.

- Any more patients who have insurance policies that will pay for all their medications if only I will write prescriptions for 92 pills every 34 days. They almost always get mad when I charge them for the trouble, time and liability involved in writing those prescriptions. And they honestly believe that since their insurance won't pay me for writing them, I should do it for nothing.

- Any more committee meetings to attend. Already they consume hours of my time every week, I never get paid a cent for serving and, about the only thing I accomplish is verification of the fact I was there.

- Any more bad-news editorials. The ones that are so easy to write. Next Christmas, after twelve months of nothing but good news, maybe we'll be a lot happier.

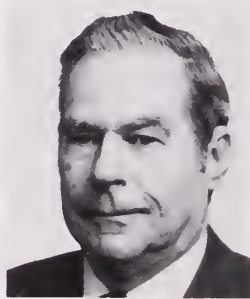
—MRJ

## PRESIDENT'S PAGE

As the year wears out, the shadows lengthen and the nights grow longer and colder. The days shorten and many — even most — of the days are dulled and dimmed by dank and dreary clouds. The scant sunshine remaining is yellow and thin and diluted by the cold winds that pierce any coat and steal our warmth. The deepening chill ensnarls our mood and affect in a deteriorating circadian rhythm that spirals ever downward into dismay, disaffection, and depression. It seems harder to hope and easier to despair.

The common human descent toward hopelessness at the time of the winter solstice is widely experienced; overt instances have been appropriately named "seasonal affective disorder" and are often known by an apt acronym: SAD.

And as the sun drifts farther and farther away into the depths of space, the unbidden thought comes that the solar warmth may never return, and a cold blackness will cover us and chill every living thing into icy stillness. To counter this dismal fantasy of the winter darkness, every human tribe at this season has found it propitious to actively emphasize



the optimistic symbols of life and warmth. Whether celebrating the birth of a babe, or lighting a festival of lights, or by the hanging of the greens, we push back the ideas of death and darkness and reiterate the ideas of life and warmth.

We meet together and sing and eat and renew old friendships and make new acquaintances. We light lights and decorate homes and the marketplace and the city streets. We send greetings to friends rarely seen, and receive greetings from those whose warmth we value. We give gifts to those we love or admire, and receive gifts from those whose love is the greatest gift. We sing the joyous carols of life and meet in our places of worship. We call together our families and know again the strengthening power of human acceptance and warmth. We re-experience the anti-depressant effect of free-will giving.

In the midst of the darkest and coldest season, we reaffirm that the giving of human love transforms the world from a physics experiment into a tabernacle of light and vibrant life.

The best is yet to be.

Happy holidays and a prosperous new year!

*Ray V. McIntyre, M.D.*



# Catamenial Hemoptysis

Philip J. Maguire, MD

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*Catamenial hemoptysis associated with endometriosis is discussed along with a patient who had massive intraperitoneal bleeding. The patient was treated with danazol.*

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**E**ndometriosis is a complex disease process, well known as a cause of pelvic pain, infertility, and destruction of pelvic organs. In recent years the frequent use of pelvic laparoscopy has revealed the disease to be extremely prevalent. Paradoxically, many patients have no pain or loss of fertility, the process having a benign course for years. Endometriosis has been found in most organs throughout the body, although reports of pulmonary endometriosis are unusual.<sup>1</sup> The following is a discussion of a patient with recurrent catamenial hemoptysis associated with massive intraperitoneal hemorrhage. In addition, necrotic erosions through the diaphragm were present. The findings were attributed to endometriosis.

## CASE REPORT

The patient is a 40-year-old black woman, para 1, gravida 1, who had a spontaneous pneumothorax and underwent pleurectomy in 1974. The cause of the pneumothorax was not determined. There were no subsequent pulmonary problems until January 1981. At that time she began to have cough and hemoptysis after the onset of each menstrual period.

The bleeding would subside with cessation of menses. Findings on pelvic examinations were normal. Because of the hemoptysis, bronchoscopy was done on two occasions in 1981. Biopsy results indicated chronic, nonspecific inflammation. Chest x-ray films revealed an opacity in the right lung base, thought to be benign. The cough and hemoptysis continued on a monthly basis for the next three-and-one-half years. In April of 1984, danazol was considered for treatment, but the patient declined because of the expense of the drug and its possible side effects. In July of 1984, she began taking Ovral oral contraceptive tablets. The hemoptysis stopped after the first cycle of the contraceptive regimen. The Ovral was then continued on a cyclic basis.

Four months later, in November 1984, the patient was seen in the emergency room because of severe abdominal pain. She was admitted to the hospital with signs of an acute abdomen. Bowel sounds were decreased, and there was general abdominal tenderness and slight rebound pain. The hemoglobin was 14.1 gm and the Hct 44%. Shortly after admission, the patient suffered an abrupt epigastric pain and was found in shock. At that time the Hgb was 9.5 gm and the Hct 28.5%.

A laparotomy revealed a massive hemoperitoneum of approximately 4000 cc. There was erosion through the diaphragm into the right lung base, with a small air leak. Several other small, necrotic fenestrations were found through the diaphragm. The capsule of the liver was eroded at the dome. Multiple fibrous adhesions extended from the dia-

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Direct correspondence to Philip J. Maguire, MD, 3435 Northwest 56th Street, #305, Oklahoma City, OK 73112.

phragm to the liver capsule. Several phrenic vessels were bleeding profusely.

Hemostasis was established with sutures, Weck clips, and pressure. After consultation with a thoracic surgeon, it was decided that drains should be placed through the abdominal wall. Since the air leak was small and there had been a pleurectomy, no chest tubes were used. No endometriosis was seen in the pelvis or peritoneal cavity.

The patient was given five units of packed blood cells. The postoperative course was uneventful, and she went home on the ninth day after surgery.

## DISCUSSION

There seems to be general agreement with Sampson's theory that endometriosis is a result of retrograde menstrual flow and that susceptibility may be related to individual immune response.<sup>2</sup> However, the idea that local mesothelial cells may transform into endometrial cells has not been discarded by everyone. When found in areas other than the pelvis, endometriosis is thought to spread by way of vascular or lymphatic channels.

Reports of recurrent catamenial pneumothorax can be found in the literature,<sup>3</sup> and as in this case, tissue studies are often nonspecific. Pulmonary endometriosis has been characterized as pleural or parenchymal in a very interesting paper by Foster et al.<sup>4</sup> Pleural implants are thought to occur by extension from pelvic disease. In such cases there tends to be advanced pelvic peritoneal involvement, and as with Meig's syndrome, it favors the right hemithor-

ax. Those patients with pulmonary parenchymal disease may not have pelvic findings. However, in Foster's study, all those with parenchymal (lung) disease had had a vaginal delivery or gynecological surgery, suggesting a hemotogenous spread.

Following surgery, this patient was treated with danazol, as reported by Johnson,<sup>5</sup> with apparent resolution of the problem. There has been no further hemoptysis. A subsequent laparoscopy revealed no evidence of endometriosis throughout the peritoneal cavity. The patient has been followed closely for the past three years and, though no longer taking danazol, has had no signs of recurrence.

## SUMMARY

A case of catamenial hemoptysis is presented, and pulmonary endometriosis is briefly discussed. The patient had a massive hemoperitoneum and subsequently was treated with danazol, with no further symptoms.

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*Philip J. Maguire, MD, a 1960 graduate of the University of Oklahoma College of Medicine, is a board certified gynecologist in Oklahoma City.*



## Coming in January

Among the manuscripts being considered for publication in January are a study on in situ saphenous vein grafts for limb salvage and a report on IgG subclass deficiency in children with recurrent respiratory infections.

Also under consideration is a commentary on DTP vaccine and the vaccine-related compensation bill.



# Diagnosis of Atypical Hirschsprung's Disease

G. Kevin Donovan, MD

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*Hirschsprung's disease (aganglionosis of the colon) is readily suspected as a cause of neonatal bowel obstruction, or of obstipation. The less common presentations provide a greater diagnostic challenge to the practitioner.*

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**H**irschsprung's disease, or congenital aganglionosis of the bowel, was first described over 100 years ago. It is now recognized as the most common cause of congenital bowel obstruction. Hirschsprung's disease, presenting as failure to pass meconium during the first 24 hours of life or as neonatal bowel obstruction, is typical and not likely to be missed by the practitioner. This discussion will focus on the more difficult cases, those that might lead the unsuspecting practitioner to delay a proper diagnosis or even to miss it entirely. Such delays, unfortunately, have led to increased morbidity for patients and even to litigation. In addition, the approaches that should be most helpful in suspecting and confirming the diagnosis in such patients will be detailed.

Hirschsprung's disease is due to an absence of ganglion cells in the myenteric plexus of the bowel. The subsequent lack of parasympathetic propulsive activity in the involved colonic segment leads to a failure of relaxation of the internal anal sphincter and lack of normal peristalsis of the affected bowel.

This usually occurs in the most distal portion of the colon, with the abnormal bowel limited to the rectosigmoid in 75% of the cases. A cardinal sign is delayed passage of meconium.

Hirschsprung's disease also is the most common cause of neonatal bowel obstruction. A typical history in patients with Hirschsprung's disease that did not initially present as bowel obstruction will reveal constipation in the first year of life, often from the time of birth. Abdominal distension may occur and growth failure may accompany the other signs and symptoms. On physical examination, a tight anal sphincter is usually found, and the rectum will not be packed with stool or feel enlarged. A barium enema confirms the finding of a narrowed or normal caliber bowel segment distally and an enlarged megacolon above it. Remember, however, that the enlarged proximal portion of the colon distends because it is normally innervated, and the smaller caliber distal bowel does not distend because of aganglionosis. Rectal biopsy confirms the absence of these ganglion cells and the patient is a candidate for surgical correction.

Atypical presentations cause a greater hazard for the missed diagnosis. First, infants may sometimes present with diarrhea and failure to thrive. There is usually some history of intermittent constipation as well. Failure to appreciate that diarrhea may be a Hirschsprung's disease symptom is one of the most common reasons for delay in diagnosis. Diarrhea probably results from increased fluid secretion into the bowel proximal to the partial obstruction. This

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leads to increased intraluminal pressure and explosive evacuations.

Infants are often treated by multiple formula changes that have little effect on their erratic bowel pattern. Some eventually develop complete obstipation and abdominal distension, and it is then usually obvious that they have a large bowel obstruction. Others develop enterocolitis, a potentially lethal and often unrecognized complication of Hirschsprung's disease. Enterocolitis is a result of continued increased intraluminal pressure and bacterial overgrowth leading to mucosal necrosis, transmural infection, overwhelming sepsis, gangrene, and perforation. The mortality rate is 30% even with aggressive therapy.

Another difficult presentation occurs in the child with total colon Hirschsprung's. This condition is more frequent in females, in children with Down's syndrome, or in those whose siblings had Hirschsprung's disease. A major problem is that the barium enema will not reveal a megacolon. However, an obstructive pattern can be expected, and failure to eliminate barium will occur, especially after a small bowel study.

A child with Hirschsprung's disease presenting as constipation with encopresis may be the trickiest presentation of all. This can occur in older children with short segment disease or mild disease. The unwary practitioner may make repeated attempts to treat this child as though the child were suffering from so-called psychogenic or functional megacolon. It is not necessary to subject every encopretic child to a diagnostic workup for Hirschsprung's disease. However, when a usually effective treatment for encopresis fails to resolve the problem, there is the tendency to blame the child for being refractory or the parents for being noncompliant. In these cases it is mandatory to prove that the poor outcome is not caused by an undiagnosed case of Hirschsprung's disease. A misdiagnosis can lead to a child with psychological as well as physical damage, and angry parents.

There are several diagnostic methods available, and the barium enema is readily obtained everywhere. A diagnostic barium enema will show the apparently narrowed segment distally, a dilated megacolon proximally, and delayed evacuation of barium on a 24-hour follow-up film. Two important tips in using the barium enema are: first, never allow the patient's colon to be "prepped" prior to the examination. A knowledgeable radiologist never requests colonic enemas or other preps prior to the

diagnostic examination. Cleaning out the colon may obliterate the very features you are trying to find. Secondly, don't forget the value of a 24-hour post-evacuation film. A flat plate done at this time may be the best clue if a classic radiologic picture isn't present, such as in infants who have not yet had time to develop a megacolon or in very short segment Hirschsprung's disease in which a megacolon and narrower transitional segment may not be obvious.

A frequently overlooked diagnostic test is anorectal manometrics. This measurement of the ability of the internal sphincter to relax normally is noninvasive and increasingly available from pediatric gastroenterologists. Finally, rectal biopsy should provide the definitive diagnosis. It can be done without general anesthesia as a suction or punch biopsy, or done operatively as a full thickness biopsy.

Suction biopsy, especially when combined with histochemical staining, is often sufficient to rule out Hirschsprung's disease without the expense or minor risks of operative biopsy. It is a painless office or bedside procedure with minimal risk of infection or bleeding and, unlike full thickness biopsy, it cannot leave scars that might interfere with subsequent corrective surgery.

Overall, the diagnostic accuracy of the test should be 70% to 80% accuracy for barium enema, 85% for rectal manometry, and 95% to 100% for biopsies. The less invasive tests should be used initially to exclude the disease. In cases with equivocal results of noninvasive tests (such as rectal manometry or suction biopsy), or unsatisfactory response to management, or a very strong initial suspicion of Hirschsprung's disease, full thickness operative biopsy will resolve the diagnostic problem.

Using this approach, and remembering these clinical clues, one should be able to avoid both the needless overtesting and the pitfalls of underdiagnosis of Hirschsprung's disease.

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# Clandestine Foreign Body of the Middle Ear: A Warning to Hearing Aid Dispensers

William R. Mast, MD, and Richard F. Judkins, MD

*Making a hearing aid mold, generally thought to be a benign procedure, may be fraught with serious complications.*

The introduction of foreign material into the middle ear space either intentionally<sup>1</sup> or inadvertently<sup>2</sup> during a surgical procedure is well known. However, the presence of a foreign body discovered in the middle ear space is extremely rare. Review of the world literature since 1965 reveals three such cases. Mitrovic and Stajic<sup>3</sup> describe the case of a welder whose tympanic membrane was penetrated by a small bit of metal, which was later removed via the transmeatal route. Perilli and Rucco<sup>4</sup> reported the discovery of a grenade splinter involving the middle ear and mastoid; it was removed via a postauricular incision. These two cases are intriguing but anecdotal. Of greater practical interest is the case reported by Kiskadden and Sasaki<sup>5</sup> in 1983 concerning the inadvertent placement of molding for a hearing aid in the middle ear space, resulting in a foreign body reaction.

The following is a report of a second similar case resulting from the introduction of hearing aid impression material into the external auditory canal.

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## REPORT OF A CASE

A 76-year-old man with the chief complaint of right otalgia and otorrhea of one month's duration was examined by his otolaryngologist. The patient gave a history of having sustained a perforation of the right tympanic membrane during World War II. Approximately one month prior to this office visit, the patient had visited his local hearing aid dealer and was fitted for a hearing aid. The patient had experienced sharp pain in his right ear when the impression material, ethyl methacrylate (Fig 1), was removed from the external auditory canal. He had continued to experience intermittent right otalgia and slight clear right otorrhea. The right ear was examined under the operating microscope by the otolaryngologist. A clean two-millimeter perforation

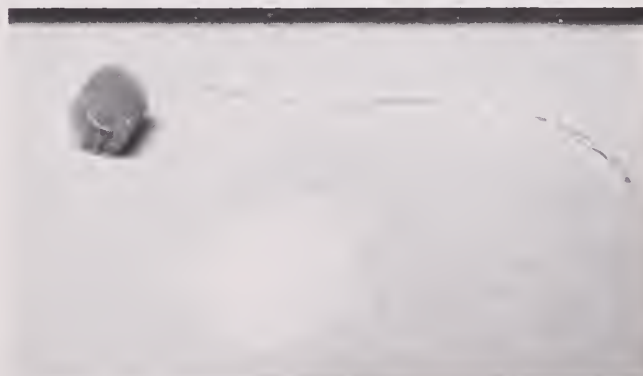


Figure 1. Small size otoblock and ethyl methacrylate used in this report

anterior to the handle of the malleus was noted. A hard, yellowish foreign body was visualized medial to the tympanic membrane perforation. Extrication under local anesthesia was attempted but was unsuccessful; the foreign body was much larger than the perforation. The following day under general anesthesia in the operating room, the foreign body was removed via an exploratory tympanotomy. The foreign body, which proved to be hearing aid mold material, measured  $7 \times 1.5 \times 1.0$  mm in size (Fig 2). It was not adherent to any middle ear structures. The tympanic membrane perforation was repaired with a tragal perichondrial graft, and it healed uneventfully. The air-bone gap of 15 dB noted prior to surgery was closed, but the moderate to severe sensorineural hearing loss remained unchanged (Fig 3).

## COMMENT

In the previously reported case of hearing aid mold material in the middle ear space, an otoblock had not been placed medially. In the present case, the hearing aid dispenser had used the smallest otoblock available (Fig 2) since he felt it would cause less patient discomfort than a larger block. This is the second reported case of the inadvertent introduction of hearing aid impression material into the middle ear space either through direct penetration, as in the case reported by Kiskadden and Sasaki, or through a tympanic membrane perforation, as in the present case. It would behoove the hearing aid dispenser to exercise due care that mold material does not bypass the otoblock, thereby endangering the tympanic membrane or middle ear structures.

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Co-author Richard F. Judkins, MD, is an associate clinical professor of surgery at Oral Roberts. He was graduated from Boston University School of Medicine.

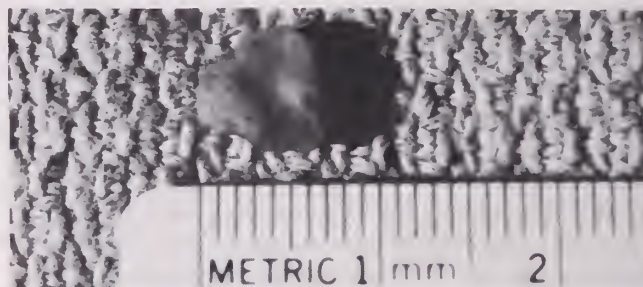


Figure 2. Foreign body following removal from the middle ear space

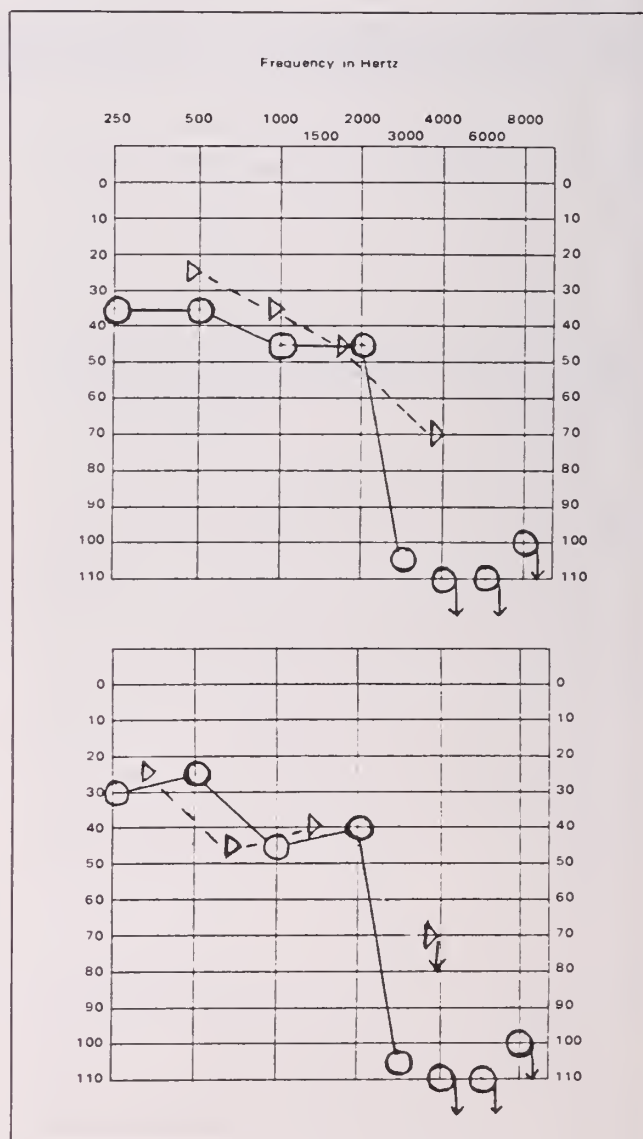


Figure 3. Pre-operative audiogram (top) for right ear of patient, and post-operative audiogram (bottom). Triangles indicate bone levels, masked. Circles indicate air levels, unmasked.



# Adolescents and AIDS Prevention

Jennifer Johnson, MD

**O**f the 74,809 cases of acquired immune deficiency syndrome (AIDS) reported in the United States through August 1988, 301 (less than one percent) were in adolescents 13 to 19 years of age. This contrasts with 1,188 (1.6%) cases in children younger than 13 years and 15,453 (21%) in persons aged 20 to 29 years. More than 20% of adolescent AIDS cases have been reported from New York City, where intravenous drug use accounts for a larger proportion of cases in adolescents and adults than in the United States as a whole. Strikingly, 11% of adolescent AIDS cases in New York have resulted from heterosexual contact with a person infected with the human immunodeficiency virus (HIV), as compared with about 4% of adult cases in New York and the United States as a whole.

An undetermined number of AIDS cases in persons 20 to 29 years old have resulted from infection with HIV during the teenage years. Data regarding the prevalence of HIV infection in adolescents are scant. HIV seropositivity among civilian applicants for military service less than 20 years of age has been reported to be the same as for volunteer blood donors. Certainly, despite the low proportion of AIDS cases in this age group, adolescents must be considered at risk for acquiring HIV infection. Considerable professional and lay attention has focused on the issues regarding adolescents and AIDS. This article will review the basis for concerns about adolescents and HIV infection and some of the

special problems regarding prevention in this age group.

### Knowledge

Teenagers often lack knowledge about AIDS and HIV infection, as has been documented in several studies. In a survey conducted in May 1985, 15% of San Francisco public school students aged 14 to 18 years believed that "just being around someone with AIDS can give you the disease." In telephone interviews conducted in Massachusetts in mid-1986, 60% of 16- to 19-year-olds thought that AIDS could be contracted by donating blood. Most adolescents, however, *are* aware that HIV is transmitted by sexual intercourse and blood exposure. Other studies have confirmed that adolescents and young adults frequently lack knowledge about HIV infections. Oklahoma was one of the first states to officially acknowledge this problem by mandating AIDS prevention education in its schools. The curriculum was successfully implemented during the 1987-88 year.

### Cognition and Adolescent Behavior

Knowledge is one of the cornerstones for AIDS prevention in adolescents. Education alone, however, does not appear sufficient to effect the behavior changes required for AIDS prevention (see following section). This is exemplified by a recent survey of teenagers. Nearly 80% knew that AIDS could be transmitted by semen, yet less than ten percent reported changes in sexual behavior due to knowl-

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From the Department of Pediatrics, University of Oklahoma Health Sciences Center, Room CHO-4N207, PO Box 26190, Oklahoma City, OK 73190.

edge about AIDS. Most commonly, these changes consisted of being "more selective of partner" or "careful." This is not surprising in light of previous knowledge about adolescent behaviors and their consequences. High rates of sexually transmitted diseases and unplanned pregnancy are the consequences of teenage sexual experimentation; substances of abuse contribute substantially to morbidity and mortality in this age group. Substance use and sexual behavior are to some extent interdependent. Drug use, including alcohol use, affects decisions about sexual behavior (abstinence or "safe sex") and about drug administration practices.

Increasing influence of the peer group, increased mobility and freedom from supervision, and inexperience — all are factors in the newly independent adolescent's vulnerability to adverse consequences of behaviors in which he or she may now choose to engage. It is not coincidental that trauma, primarily automobile accidents associated with alcohol use, kills more American teenagers annually than any other cause. Cognitive factors play a special role in adolescent risk-taking. The teenager does not achieve Piaget's stage of "formal operations" until mid-adolescence. This cognitive development enables youth to think abstractly — beyond the here and now — and to conceptualize. This is one reason why younger teens appear to be more concerned about transmission of HIV from drinking fountains and toilets than from sexual intercourse or intravenous drug use. Younger teens in particular are apt to have difficulty comprehending the possible consequences of their actions.

Psychologist David Elkind has described several other characteristics of adolescent cognition, among them the "personal fable." Adolescents, having a new sense of themselves as unique and special individuals, create stories about themselves which they believe to be true. They believe themselves to be invincible and magically protected from untoward events. Teenage girls who know about human sexuality and understand reproductive physiology nevertheless may consider themselves "immune" to pregnancy — "that won't happen to me"!

### Modification of Adolescent Behavior

Years of work have documented the difficulties inherent in attempting to alter adolescent risk-

taking behavior, particularly in the areas of sexuality and substance abuse. Yet, precisely these two activities must be influenced for the prevention of HIV infection. Fortunately, a knowledge base has emerged that can facilitate AIDS prevention efforts. Health educational literature suggests, for example, that strictly informational programs do not always effect corresponding changes in attitudes or behaviors. This has been the case for smoking avoidance and dietary modification programs for adolescents. Education about sexuality and reproduction does not, on the other hand, result in increased sexual activity.

Attitudes and behaviors are more likely to be affected if an educational program includes the introduction of skills needed to alter behaviors. With regard to AIDS prevention, risk-reduction programs for gay and bisexual men utilizing cognitive-behavioral and cognitive-affective approaches were more effective than one limited to a cognitive (informational) approach. Teenage pregnancy and substance abuse prevention programs appear most effective when schools and communities band together to promote common values and to enhance a sense of self-efficacy, self-esteem, responsible decision-making, and communication skills, as well as to increase factual knowledge.

### Summary

Adolescents are at risk for HIV infection because of their experimentation with sexual activity and substance abuse. Certain cognitive factors contribute to the high rates of untoward consequences from these activities. AIDS prevention programs for adolescents should ideally increase knowledge and incorporate techniques for enhancing life skills and self-esteem.

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## Recommendations for Influenza Vaccine 1988-89

Updated recommendations for influenza vaccine and antiviral agents available for the 1988-89 influenza season have been issued by the Immunization Practices Advisory Committee (ACIP) of the US Public Health Service.

Health care workers potentially capable of nosocomial transmission of influenza to persons at high risk for influenza complications are included in one of three groupings of persons recommended as target groups for special vaccination programs. Health care workers can transmit influenza to these high-risk patients while they are incubating the infection, undergoing subclinical infection, or continuing to work while experiencing symptoms.

Influenza vaccine is also recommended for persons with HIV infection as a precaution against serious illness and complications. The antiviral drug amantadine hydrochloride should also be considered as prophylaxis for persons with AIDS (especially

children with AIDS) when influenza activity occurs. It should be noted that amantadine is effective only against influenza A.

The timing of influenza vaccination should be carefully considered. Because antibody levels can begin to decline within a few months of vaccination, it is important to avoid vaccinating too far ahead of influenza season. The optimal time to vaccinate is November, since peak levels of influenza generally do not occur before December. However, high-risk persons who live at home should receive the vaccine at their last regularly scheduled medical appointment before December. Further, hospital discharge procedures should include vaccination of high-risk patients from September through February.

Questions concerning influenza vaccine recommendations can be directed to the Immunization Division, Oklahoma State Department of Health, phone 405/271-4073.



DISEASE	September 1988	TOTAL TO DATE		
		This Year	Last Year	5 Yr. Avg.
AMEBIASIS	0	3	8	8
CAMPYLOBACTER INFECTIONS	20	170	211	192
ENCEPHALITIS, INFECTIOUS	0	4	19	22
GIARDIA INFECTIONS	38	157	150	175
GONORRHEA (Use ODH Form 228)	794	5651	7661	9408
HAEMOPHILUS INFLUENZAE				
INVASIVE DISEASE	8	148	146	141
HEPATITIS A	53	406	217	312
HEPATITIS B	20	141	201	175
HEPATITIS, NON-A NON-B	3	35	37	41
HEPATITIS UNSPECIFIED	0	21	25	70
MEASLES (RUBEOLA)	0	8	3	10
MENINGITIS, ASEPTIC	10	52	133	141
MENINGITIS, BACTERIAL				
(non-meningococcal, non H. Influenzae)	1	14	31	44
MENINGOCOCCAL INFECTIONS	0	14	21	23
PERTUSSIS	22	61	127	174
RABIES (Animal)	5	30	31	70
ROCKY MOUNTAIN SPOTTED FEVER	12	84	80	113
RUBELLA	0	1	5	5
SALMONELLA INFECTIONS	60	356	359	345
SHIGELLA INFECTIONS	34	162	125	164
SYPHILIS (Use ODH Form 228)	17	124	129	140
TETANUS	1	1	1	1
TUBERCULOSIS	31	188	186	180
TULAREMIA	1	13	24	17
TYPHOID FEVER	0	0	3	2
MUMPS	16	186	80	—

Diseases of Low Frequency	Total to Date This Year
ACQUIRED IMMUNE DEFICIENCY SYNDROME	118
BRUCELLOSIS	2
LEGIONNAIRES' DISEASE	8
MALARIA	10
REYE SYNDROME	0
TOXIC SHOCK SYNDROME	8

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*Precertification criteria distributed***OFPR receives new contract effective for three years**

The Oklahoma Foundation for Peer Review, Inc. (OFPR), in Oklahoma City has been designated the state's peer review organization for the period October 1, 1988, to September 30, 1991.

OFPR's new contract continues most of the types of reviews performed during the previous contract period. Several new reviews are also included.

Required review activities are conducted in every case selected for review. The new contract provides for admission necessity review, discharge review (to identify patients discharged prematurely), DRG validation, invasive procedure review (if any invasive procedure is performed during the hospitalization, the case is reviewed to determine medical necessity and appropriateness of the procedure), generic screen application, coverage review, and waiver of liability determination. The invasive procedure review is new.

Types of review include the specific categories of review selection and methodology. The following list indicates the different types of sampling and review OFPR is required to address (\* indicates new review type, Medicare only):

1. 3% random sample
2. 50% of the transfers to other PPS hospitals
3. 25% of transfers to swing beds
4. 100% of transfers to exempt psychiatric units
- \*5. 25% of readmissions within 31 days of discharge
- \*6. Intervening care (occurring in skilled nursing facility, hospital outpatient area, home health agency)
7. Focused DRGs
  - DRG 462 — Rehabilitation 25% sample
  - DRG 468 — Unrelated OR procedures 50% sample
  - \*DRG 385 — Neonates, died or transferred 100%
  - \*DRG 386 — Extreme immaturity, neonates
  - \*DRG 387 — Prematurity with major problems

- \*DRG 388 — Prematurity without major problems
- \*DRG 389 — Full term neonate with major problems
- \*DRG 390 — Neonate with other significant problems
- \*DRG 391 — Normal newborn
- DRG 472 — Extensive burns 100%
- \*DRG 474 — Tracheostomy 100%
- \*DRG 475 — Mechanical ventilation through endotracheal intubation 100%

8. Day and cost outliers 25% sample
9. Medicare code editor — 100% of the following principal diagnoses:

ICD-9-CM

- |  |        |
|--|--------|
| Diabetes mellitus, without mention of complication, non-insulin dependent .....    | 250.00 |
| Diabetes mellitus, without mention of complication, insulin dependent ...          | 250.01 |
| Obesity .....  | 278.0  |
| Impacted cerumen .....   | 380.4  |
| Benign hypertension .....  | 401.1  |
| Left bundle branch hemiblock .....   | 426.2  |
| Other left bundle branch block .....   | 426.3  |
| Right bundle branch block .....  | 426.4  |
| Positive SRL/VRL HC3 .....   | 795.8  |
| Elevated blood pressure reading without diagnosis of hypertension .....            | 796.2  |
| Other and unspecified complications of medical care, not elsewhere specified ..... | 999.9  |
| Cardiac pacemaker (fitting and adjustment) .....                                   | V53.3  |
10. Specialty Hospitals
    - 15% sample — Exempt units of PPS hospitals
    - 15% sample — Exempt hospitals
  - \*11. Ambulatory Surgery — 5% sample of procedures performed in outpatient areas and am-

(continued)

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## OFPR (continued)

bulatory surgery centers. (This review selection excludes cataracts)

### \*12. Preadmission/preprocedure review:

The following ten procedures require precertification from OFPR prior to the admission, if that is the reason for admission, or prior to the procedure being performed:

1. Cataract extraction
2. Carotid endarterectomies
3. Cholecystectomy
4. Major joint replacement
5. Coronary artery bypass with graft
6. Percutaneous transluminal coronary angioplasty
7. Laminectomy
8. Inguinal hernia repair
9. Prostatectomy
10. Pacemaker insertion (implants and reimplants)

OFPR has developed specific criteria for each of the procedures requiring preadmission/preprocedure review. The criteria are designed to validate the medical necessity and appropriateness of the procedure and quality of the services rendered, as well as the appropriateness of the setting in which the procedure is performed. These criteria are subject to revision.

Due to the volume of different criteria sets (preadmission/preprocedure, OFPR admission criteria, ambulatory surgery criteria, and specialty hospital criteria), copies were provided to hospitals only; extra copies may be obtained by calling OFPR. The facility in which a physician has privileges should be able to provide him or her with copies.

There are several important points to remember regarding precertification:

- Certification is not available *after* the procedure has been performed, even on the same day.

- For emergency situations, where the procedure is performed without advance notice (ie, after OFPR office hours during the week, or on weekends), the procedure does not require precertification. However, OFPR will review 100% of these cases on a retrospective *postpay* review. Hospitals have received instructions from OFPR and the fiscal intermediary on the correct billing of these claims in order to surpass the prepayment review system.

(continued)

*Stickers still available*


## Doctors give big thumbs up to Prescription for Life campaign

The "Prescription for Life" campaign promoting the use of automobile seat belts has met with approval among some 500 state physicians who recently received kits containing promotional material. Sponsored by the Oklahoma Highway Safety Office and the Oklahoma State Medical Association (OSMA), the campaign was evaluated on forms returned to OSMA headquarters by participating doctors.

Promotional material included posters, fact sheets, brochures, and lapel stickers for distribution

to young patients. One physician reported using his stickers on return envelopes with his monthly office billings.

Stickers have also been sent to the Oklahoma Indian Health Service and to a telephone cooperative for use at an upcoming safety meeting.

The OSMA has extra "Prescription for Life" stickers. Doctors wanting a supply of the stickers should contact Susan Meeks at the OSMA, (405) 751-8597 or 1-800-522-9452. Stickers will be mailed to physicians on a first come, first served basis. 

OFPR Preadmission/Preprocedure List


Procedure	ICD-9-CM Codes	CPT-4 Codes
Cataract extraction	13.11, 13.19, 13.2, 13.3 13.41, 13.42, 13.43, 13.51 13.59, 13.61, 13.62, 13.63 13.64, 13.65, 13.66, 13.69	66830, 66840, 66850, 66915 66920, 66930, 66940, 66983 66984
Carotid endarterectomy	38.12	35001, 35301, 35501, 35601 35606
Cholecystectomy	51.21, 51.22	47600, 47605, 47610, 47612 47620
Major joint replacement	81.41, 81.51, 81.59, 81.61 81.62, 81.63, 81.64, 81.69	27130, 27132, 27134, 27137 27138, 27447, 27486, 27487
Coronary artery bypass with graft	36.10, 36.11, 36.12, 36.13 36.14, 36.15, 36.16, 36.19	33504, 33510, 33511, 33512 33513, 33514, 33516, 33520 33525, 33528
Percutaneous transluminal coronary angioplasty	36.01, 36.02	92982, 92984
Laminectomy	03.09, 80.50, 80.51	63001, 63003, 63005, 63010 63011, 63015, 63016, 63017 63020, 63021, 63030, 63031 63035, 63040, 63042, 63045 63046, 63047, 63048
Inguinal hernia repair	53.00, 53.01, 53.02, 53.03 53.04, 53.05, 53.10, 53.11 53.12, 53.13, 53.14, 53.15 53.16, 53.17	49500, 49505, 49510, 49515 49520, 49525, 49530, 49535
Transurethral resection of the prostate	60.2	52601, 52612, 52614, 52650
Permanent pacemaker insertion	37.74, 37.76, 37.80, 37.81 37.82, 37.83, 37.85, 37.86 37.87	33200, 33201, 33206, 33207 33208, 33212, 33216, 33218 33219

(Rev 10/18/88)

## OFPR (continued)

• Precertification of these procedures is required when the procedures are performed on an inpatient basis, outpatient basis, or in an ambulatory surgery center.

• Effective date for implementation of the prepayment review for ambulatory surgery centers, outpatient departments of hospitals, and inpatient procedures was November 1, 1988. Any of the ten procedures performed between October 1, 1988, and November 1, 1988, (or the implementation of the prepayment system) will be reviewed on a retrospective basis. OFPR will provide precertification numbers should the hospital or physician wish to call.

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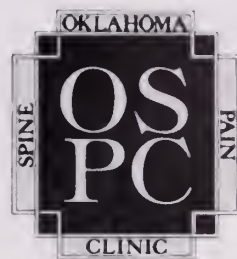
## DEATHS

### **Tullos Oswell Coston, MD** **1905 - 1988**

Oklahoma City ophthalmologist Tullos O. Coston, MD, died at his home October 21, 1988. A native of Dixie, La, Dr Coston was graduated from the Johns Hopkins University School of Medicine in 1930. He moved to Oklahoma City in 1936 to practice ophthalmic surgery and was chairman of the Department of Ophthalmology at the University of Oklahoma Health Sciences Center from 1962 to 1972. He was also a founder and senior consultant of the Dean A. McGee Eye Institute.

### **William Eldon Wendel, MD** **1914 - 1988**

OSMA Life Member William E. Wendel, MD, Eufaula, died October 5, 1988. A general practitioner, Dr Wendel was born in Wichita, Kans, and graduated from the University of Kansas School of Medicine in 1940. In 1946, after serving in the US Navy during World War II, he established a medical practice in Eufaula.



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<i>Hugh Albert Stout, MD</i>	<i>May 7</i>
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- (C) Commentary
- (E) Editorial
- (H) Okla State Dept of Health page
- (L) Reaction Time (letters)
- (N) News story
- (S) Scientific article
- (Sp) Special article
- (W) Worth Repeating (reprints from other sources)

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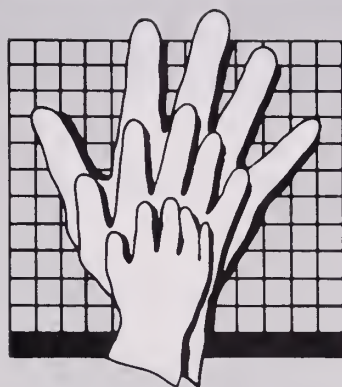
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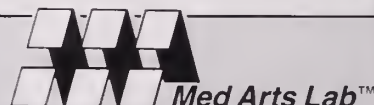
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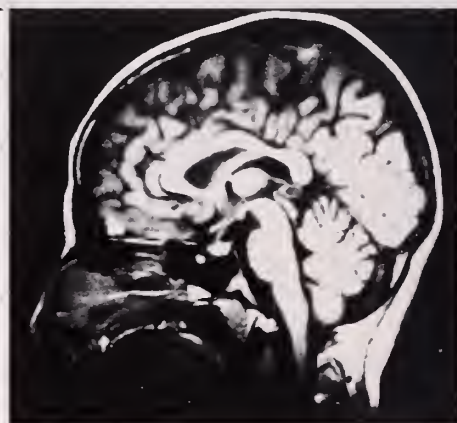
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### Style

All manuscripts should adhere to the style adopted by the American Medical Association as illustrated in *JAMA* and detailed in the AMA's *Manual for Authors & Editors*. Footnotes, bibliographies, and legends for illustrations should be typewritten, double-spaced, on separate sheets. References are to be listed in the order of their appearance in the article.

### Illustrations

Illustrations other than the author's will not be accepted for publication unless accompanied by written permission from the original source. Illustrations should be labeled with the author's name and must be numbered in the order in which they are referred to in the article. The quality of all illustrations must be in keeping with the quality of the magazine.

### News

Readers are encouraged to submit news items of interest to Oklahoma physicians. Where dates of meetings, etc., are important, please remember that each issue closes on the first day of the *preceding* month and reaches subscribers in the latter half of the month of publication.

### Reprints

Authors will receive reprint order forms from the Transcript Press, 222 East Eufaula, Norman, Oklahoma 73069, prior to publication of their articles. Other requests for reprints must be made to the Transcript Press within 30 days after publication.

### Back Issues

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## Season's

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## THE LAST WORD

■ **Edward J. Tomsovic, MD**, dean of the University of Oklahoma Tulsa Medical College, has been appointed councilor of the State of Oklahoma for the 50,000-member Southern Medical Association. Dr Tomsovic will be one of seventeen members of the association's governing body, or council, serving sixteen member states and the District of Columbia.

■ **Oklahoma City oncologist William L. Hughes, MD**, was presented the American College of Physicians (ACP) Laureate Award at a recent ACP state chapter meeting. The award recognizes Dr Hughes's service as president of the Oklahoma Society of Internal Medicine, governor of the Oklahoma Chapter of the ACP, and chairman of the state legislative and public policy committee.

■ **Bookmarks promoting the Oklahoma AIDS Information Line** have been printed and are now available for distribution. Physicians may obtain bookmarks for their patients by calling the AIDS Line, 1-800-522-9054. The AIDS Information Line is a toll-free, 24-hour hotline with TDD services for the deaf. It is a cooperative project of the Oklahoma State Department of Health and the Oklahoma State Department of Mental Health.

■ **The 16th Annual Critical Care Medicine Course**, presented by the Department of Medicine, University of Oklahoma College of Medicine, will be conducted Sunday through Friday, March 5-10, 1989, in Oklahoma City. CME credits for AMA, AOA, AAFP, and ACEP have been approved. For information on the course, contact Ms Dora Lee Smith, Coordinator, Critical Care Medicine Course, University of Oklahoma Health Sciences Center, Room 3SP-400, PO Box 26901, Oklahoma City, OK 73190, (405) 271-5904.

■ **Accidental bonding of cyanoacrylic glues** ("super glues") to skin on the hands, eyelids, and lips is a well-known problem that usually responds to nonsurgical treatment. But a letter in October's *Archives of Otolaryngology-Head and Neck Surgery* describes a more unusual and difficult case in which surgery was needed to remove a hardened acrylic glue plug from the middle portion of a patient's ear canal. The letter, by Hoke D. Pollock, MD, of Wil-

lington, NC, says the culprit in the incident was the patient's 3-year-old son, who squirted the glue into his father's left ear while the man was sleeping. The man was unaware of the incident until a few days later, when he complained of a full sensation in the ear and an associated hearing loss. Surgeons had to remove the glue, which had hardened into a painful, canal-filling cast, in a piecemeal fashion. Even the tympanic membrane was coated with the glue, although the glue was removed without creating a perforation. The patient eventually recovered his hearing.

■ **Mark R. Johnson, MD, Oklahoma City, Journal** editor-in-chief and secretary of the Oklahoma Board of Medical Licensure and Supervision, was the guest of honor at a surprise dinner celebration October 15. The "reverent (and not so reverent) retrospection," hosted by the licensing board, honored Dr and Mrs Johnson on the occasion of his retirement from that organization.

■ **Dues statements for the Oklahoma State Medical Association** were mailed this month. Members are reminded that the payment deadline is March 31, 1989.

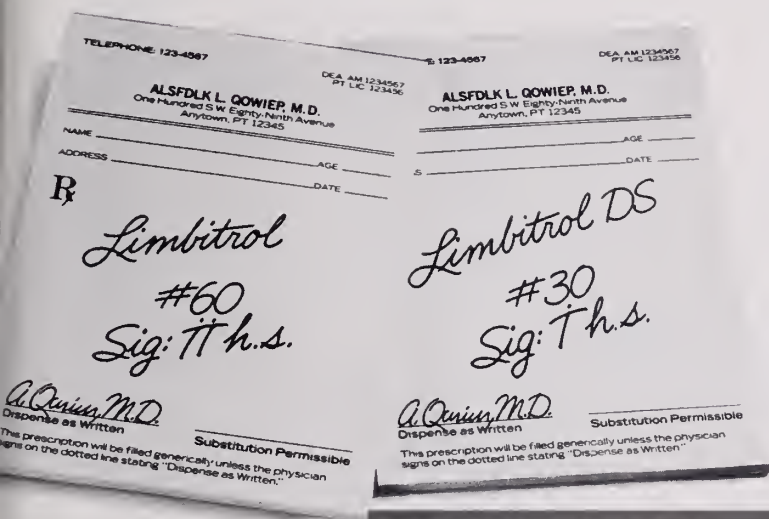
■ **Clifford G. Wlodaver, MD, Oklahoma City**, an infectious disease specialist, has been elected president of the Oklahoma Infectious Diseases Society. Dr Wlodaver is a graduate of Cornell University Medical College, New York. He practices at the Oklahoma City Clinic.

■ **"Injury of the Shoulder and Elbow: The Throwing Motion"** is the title of a sports medicine seminar to be conducted Saturday, January 14, 1989, in Oklahoma City. Presented by the Oklahoma Center for Athletes and the Continuing Medical Education Department of HCA Presbyterian Hospital, the course is being offered to orthopaedic surgeons, primary care physicians, trainers, and physical therapists. It is designed to teach participants the anatomy and biomechanics of the throwing motion and the common problems affecting the shoulder and elbow as a result of the repetitive stress. For additional information contact Kathy Hampton, (405) 271-6447. □



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References: 1. Data on file, Hoffmann-La Roche Inc., Nutley, NJ. 2. Feighner VP, et al: *Psychopharmacology* 61:217-225, Mar 22, 1979.

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**Adverse Reactions:** Most frequent: drowsiness, dry mouth, constipation, blurred vision, dizziness, bloating. Less frequent: vivid dreams, impotence, tremor, confusion, nasal congestion. Rare: granulocytopenia, jaundice, hepatic dysfunction. Others: many symptoms associated with depression including anorexia, fatigue, weakness, restlessness, lethargy.

Adverse reactions not reported with Limbitrol but reported with one or both components or closely related drugs: **Cardiovascular:** Hypotension, hypertension, tachycardia, palpitations, myocardial infarction, arrhythmias, heart block, stroke. **Psychiatric:** Euphoria, apprehension, poor concentration, delusions, hallucinations, hypomania, increased or decreased libido. **Neurologic:** Incoordination, ataxia, numbness, tingling and paresthesias of the extremities, extrapyramidal symptoms, syncope, changes in EEG patterns. **Anticholinergic:** Disturbance of accommodation, paralytic ileus, urinary retention, dilatation of urinary tract. **Allergic:** Skin rash, urticaria, photosensitization, edema of face and tongue, pruritus. **Hematologic:** Bone marrow depression including agranulocytosis, eosinophilia, purpura, thrombocytopenia. **Gastrointestinal:** Nausea, epigastric distress, vomiting, anorexia, stomatitis, peculiar taste, diarrhea, black tongue. **Endocrine:** Testicular swelling, gynecomastia in the male, breast enlargement, galactorrhea and minor menstrual irregularities in the female, elevation and lowering of blood sugar levels, and syndrome of inappropriate ADH (antidiuretic hormone) secretion. **Other:** Headache, weight gain or loss, increased perspiration, urinary frequency, mydriasis, jaundice, alopecia, parotid swelling.

**Drug Abuse and Dependence:** Withdrawal symptoms similar to those noted with barbiturates and alcohol have occurred following abrupt discontinuance of chlordiazepoxide; more severe seen after excessive doses over extended periods; milder after taking continuously at therapeutic levels for several months. Withdrawal symptoms also reported with abrupt amitriptyline discontinuation. Therefore, after extended therapy, avoid abrupt discontinuation and taper dosage. Carefully supervise addiction-prone individuals because of predisposition to habituation and dependence.

**Overdosage:** Immediately hospitalize patient. Treat symptomatically and supportively. I.V. administration of 1 to 3 mg physostigmine salicylate may reverse symptoms of amitriptyline poisoning. See complete product information for manifestation and treatment.

**How Supplied:** Double strength (DS) Tablets, white, film-coated, each containing 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt), and Tablets, blue, film-coated, each containing 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt)—bottles of 100 and 500; Tel-E-Dose<sup>®</sup> packages of 100; Prescription Paks of 50.



ROCHE PRODUCTS INC.  
Manati, Puerto Rico 00701

In the depressed and anxious patient

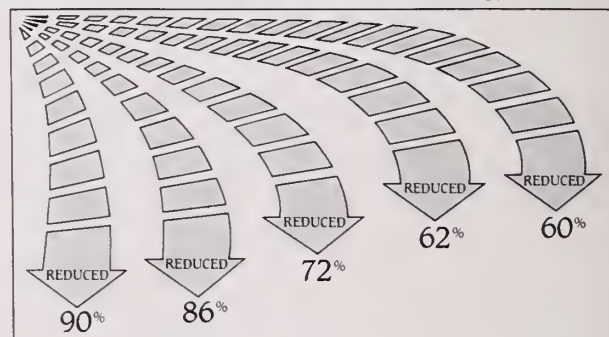
# See Improvement In The First Week<sup>1</sup>

And The Weeks That Follow

- ➡ 74% of patients experienced improved sleep after the first *h.s.* dose<sup>1</sup>
- ➡ First-week reduction in somatic symptoms<sup>1</sup>

Caution patients about the combined effects of Limbitrol with alcohol or other CNS depressants and about activities requiring complete mental alertness, such as operating machinery or driving a car. In general, limit dosage to the lowest effective amount in elderly patients.

Percentage of Reduction in Individual Somatic Symptoms During First Week of Limbitrol Therapy\*



VOMITING NAUSEA HEADACHE ANOREXIA CONSTIPATION

\*Patients often presented with more than one somatic symptom.

## Limbitrol<sup>®</sup>

Each tablet contains 5 mg chlordiazepoxide and 12.5 mg amitriptyline (as the hydrochloride salt) (IV)

## Limbitrol DS<sup>®</sup>

Each tablet contains 10 mg chlordiazepoxide and 25 mg amitriptyline (as the hydrochloride salt) (IV)

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Please see summary of product information inside back cover.



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*The New York Academy of Medicine*

**DUE IN 4 WEEKS UNLESS RENEWED**  
**NOT RENEWABLE AFTER 8 WEEKS**

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